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Syracuse Univ., N.Y.

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This second volume contains the remaining program elements and support system models for the proposal described in Volume I, SP 002 147. One section is devoted to each of three "program components" (unified sets of curricular instructional experiences each comprised of several "instructional modules," planned instructional episodes from several hours to several months in length). The sections on the Professional Sensitivity Training Component and the Social-Cultural Foundations Component, which emphasizes educational philosophy and sociology, contain rationale, organization, and outlines of the instructional modules, each including prerequisites, estimated time, operational objectives, and description of instructional activities with flow chart. The outline of the Self-Directed Component, emphasizing individualized instruction and utilization of educational technology, includes justification and an operational description including facilities and staffing. A 20-page scenario depicts a hypothetical student progressing through the self-paced, 5-year program. Four sections present rationale and descriptions of the three support systems: program (including both development process and operation), information (including its use in management, measurement, evaluation, and research and dissemination), and organizational (involving cooperation of universities, school systems, and developers of educational materials). Included is a 143-item bibliography. (ED 018 677 is a related document.) (JS)

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FINAL REPORT
Project No. 8-9018
Contract No. OEC-0-8-0918-3313 (010)

SPECIFICATIONS FOR A COMPREHENSIVE UNDERGRADUATE AND INSERVICE TEACHER EDUCATION PROGRAM FOR ELEMENTARY TEACHERS

Volume II

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October 31, 1968

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

SP002148

CHAPTER 7

Professional Sensitivity Training Component

Rationale

We need teachers who behave in ways that maximize the learning of their pupils, for this is the goal of all education. Clearly, this means that teachers must make decisions about how to behave, and they must base such decisions on appropriate and sufficient information. Among other things, this decision-making process requires teachers to be aware of and sensitive to the numerous interpersonal dimensions which influence the learning situation. The major task of the Professional Sensitivity Training Component would be to increase the student's awareness of and sensitivity to the interpersonal dimensions of the proposed model program.

In spite of its relatively recent addition to the vocabulary of education, the phrase "sensitivity training" has already come to have a variety of quite different meanings which seem only to be a bit less than ambiguous. For the purposes of this paper, "sensitivity training" and "professional sensitivity training" will be used interchangeably and will refer to those aspects of the proposed model elementary education program which are specifically concerned with the development of the student's understandings and skills relevant to the dynamics of intrapersonal, interpersonal, group and organizational interactions in terms of himself as a teacher and as the focal point of reference.

Few educators would argue that the student behaviors which are suggested by the above definition of sensitivity training are not an important facet of teacher competency. Until quite recently, however, teacher education programs only rarely provided learning experiences intended to develop any of these outcomes in students. The result has been that such learning has been largely incidental and far too infrequent. The bias here is that teacher education institutions must create programs which are designed so as to maximize these learnings for their students. This then is the role of the Professional Sensitivity Training Component envisioned for the model program.

However, the inclusion of sensitivity training in a program such as that is not without its problems. Primary among these is the fact that the role of sensitivity training in the education of teachers is not as yet clearly established. To date, very few teacher education institutions have included sensitivity training as a part of their program. Therefore, although widely used in various settings, sensitivity training remains largely untried and untested as a dimension of teacher education. Our best information does point to several relationships between the products of sensitivity training and teacher competency which do seem sound, and which are generally accepted although empirical evidence is sketchy. For this reason, many of the prescriptions which characterize the Professional

Sensitivity Training Component of this program are based on untested assumptions, assumptions which this program proposes to test. The three assumptions most basic to the component are:

1. The effectiveness of the elementary school teacher is enhanced by an increased awareness of and sensitivity to himself as a person.
2. The effectiveness of the elementary school teacher is enhanced by an increased awareness of and sensitivity to himself as a teacher of children.
3. The effectiveness of the elementary school teacher is enhanced by an increased awareness of and sensitivity to himself as a member of the educational system.

This list of assumptions is--and is meant to be--quite global. Specificity will come later as this document deals with explanations of these assumptions, justifications of their selection, descriptions of the instructional modules they seem to suggest, and a cursory examination of alternative assumptions.

Organization of the Component

The Professional Sensitivity Training Component would make its major contribution during the pre-professional phase of the program. It is during this period that the component (in conjunction with other components) would focus on the understandings and skills relevant to increasing the student's awareness of and sensitivity to "self as a person". The component (again in conjunction with other components) would be mainly concerned with those learnings centering around the student's examination of "self as a member of the educational system". The Professional Sensitivity Training Component would not play a formal role in the student's experience during the resident year, although the program would provide an opportunity for the student to integrate and demonstrate his earlier learnings during this time.

The content of the Professional Sensitivity Training Component is based on the notion that the effectiveness of an elementary school teacher is in great measure determined by his ability to make sound instructional decisions, and that this ability is largely influenced by his sensitivity to himself as a person, as a teacher of children, and as a member of the total educational system. It would seem to be difficult to argue otherwise.

The organization of the component assumes that the acquisition of the understandings and skills relevant to these dimensions of sensitivity can best be accomplished through the particular sequence of instructional activities suggested here. Alternative activities and sequences might prove to be equally appropriate. Those presented in this description represent only one possibility, that possibility which seemed to be the most attractive of those considered for this program.

The organization of the Professional Sensitivity Training Component suggests that the component's three major goals are developmental in nature. Awareness of self as a person is fundamental. That is, it is assumed that the student is best able to increase his sensitivity regarding his role as a teacher after he has acquired a sufficient understanding of himself as a person. Further, it is assumed that the student will become better aware of his place as a professional in the school organization and the total educational system when he is able to base these learnings on his understanding of his role in the classroom. This notion receives empirical support from recent work at the Research and Development Center for Teacher Education at the University of Texas (Fuller, Pilgrim, and Freeland, (41) and Fuller and others, (42).

The professional sensitivity training modules are built on several assumptions about the nature of the learning process which may distinguish them from more traditional patterns of instruction:

(1) Each student is responsible for his own learning; the faculty facilitates the student in this task.

(2) Learning is a combination of experience and conceptualization; a major aim of sensitivity training is to provide situations in which the students are encouraged to examine their experiences so that valid generalizations might be made.

(3) Much learning takes place in interpersonal settings; learning is maximized when that setting is characterized by openness and honesty of communication on both the cognitive and affective levels.

PST-1: Increasing Awareness of Self as a Person through T-group Training

I. Prerequisites: None.

II. Placement of Module: Junior, pre-professional year, prior to all other modules.

III. Estimated Time: Student time--45 hours. (completed in two to three weeks).
University faculty time--30 hours.
Clinical Professor and Clinical
Teacher time--0 hours.

IV. Operational Objectives: The general purpose of this module is to increase the student's intrapersonal and interpersonal effectiveness through T-group sensitivity training. The general objectives of this module should prepare the student to do the following.

A. Participate in intensive group interaction with his student peers.

B. Become increasingly aware of the impact which his behavior has on others, and the impact their behavior has on him.

If these broad objectives are achieved, the student should, for example, be able to do the following:

A. Identify his reactions to specific peer behaviors.

B. Provide others in his group with descriptive feedback when appropriate.

C. Seek feedback about his behavior in the group.

D. Act in a manner which he perceives as being congruent with his feelings.

V. Modular Activity Flow Chart: See Figure 7.1.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

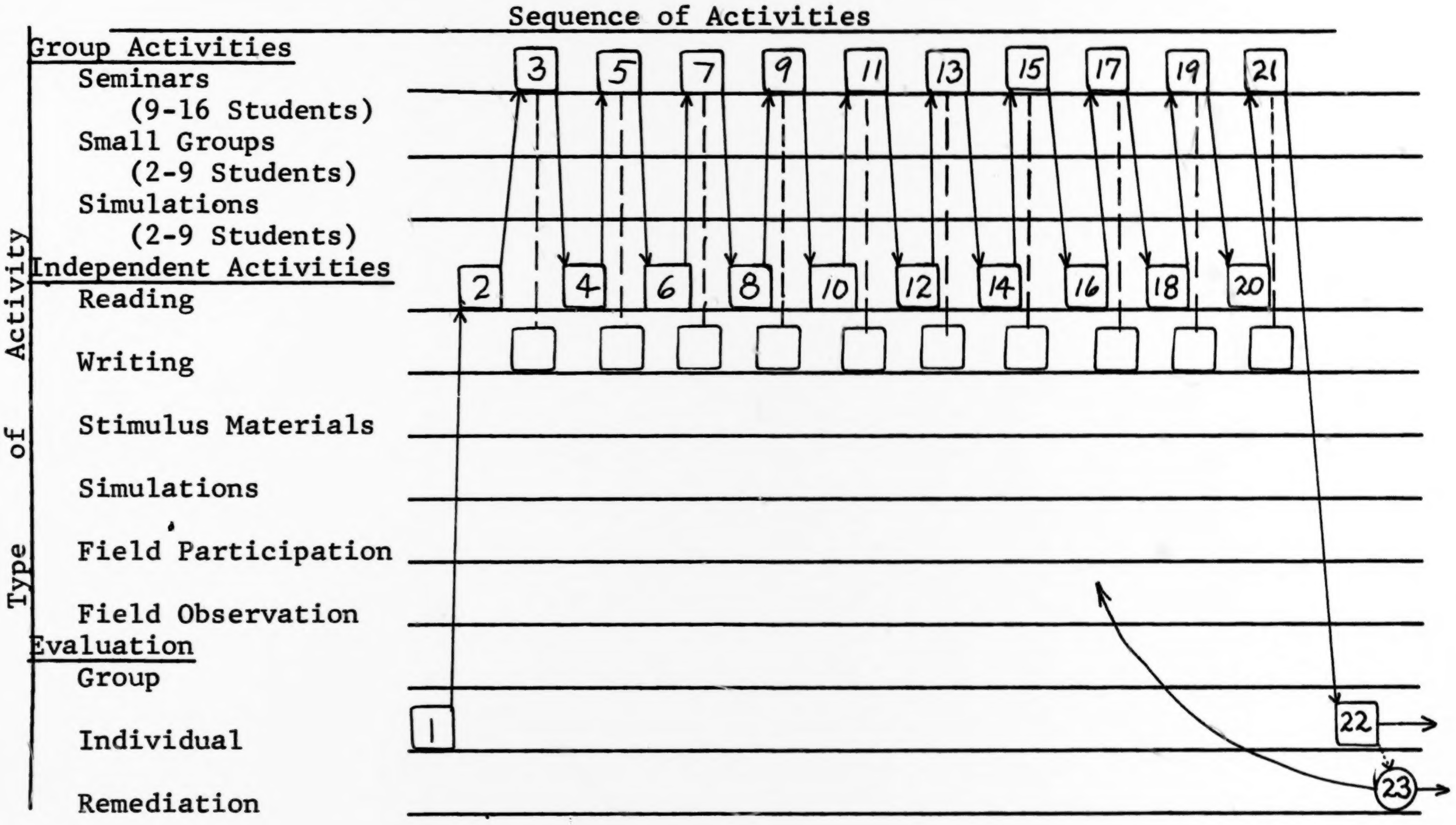
2. Students will read selected materials which would serve as "ad-

vanced organizers" for the T-group experience to follow. These materials would deal with the various dimensions of interpersonal relationships to be explored. It is assumed that such materials would help orient the student to the type of intensive group methods which are such an integral part of the module; that is, they would help him clarify his expectations with regard to what is likely to be a very new and different experience for him. In addition, other selected materials would be available to those students who might elect to do further reading at any time during the two-week session (These readings are represented by numbers 4, 6, 8, 10, 12, 14, 16, 18, 20 on Figure 7.1). The major activity of the module would be a series of 10 three-hour T-group sessions over a two-week period. Each group would consist of approximately 12 students with at least one faculty T-group trainer in each group. The composition of the various groups would be pre-determined according to established criteria; for example, friendships, pre-module ability, personality dimensions, or further teaching plans (grade level or specialization). Sessions would follow the usual T-group pattern in that: (a) sessions would be unstructured and process-oriented, (b) both content and process would emerge from the group, (c) the group would deal with interpersonal ("here and now") rather than therapeutic ("there and then") concerns, and (d) the trainer--in a non-directive, non-evaluative manner--would facilitate group members' examination of their behavior by encouraging--among other things--openness in communicating the expression of feelings and ideas, and the acceptance of feelings and ideas. (These sessions are represented by numbers 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 on Figure 7.1). Each group member will be required to keep (and submit at the end of the module) a personal log reflecting his feelings and ideas with regard to his and his group's experiences during each of the T-group sessions. The log would serve two primary purposes: (a) it would help the student crystallize his thinking about his experiences, and (b) the log might provide one basis for evaluation of the student's intrapersonal and interpersonal growth with indication as to the effects of various aspects of the T-group experience.

3. Post-test to determine if the student should:
   (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

4. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart PST-1
Figure 7.1


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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PST-2: The Classroom Group as a Social System

I. Prerequisites: PST-1 and concurrent with SCF-1

II. Placement of Module: Junior, pre-professional year.

The student, with faculty assistance via the enabling seminar and the Facilitation Center, would decide when it would be most appropriate for him to take this module. However, it is expected that most students would elect to take this module around the same time as SCF-1.

III. Estimated Time: Student time--30 hours.
University faculty time--10 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general purpose of this module is to increase the student's understandings and skills with regard to the socio-psychological dynamics of instructional groups. The general objectives of this module should prepare the student to do the following:

A. Describe the socio-psychological parameters applicable to all instructional groups.

B. Formulate a conceptual framework within which he might gain a better understanding of socio-psychological dimensions of instructional groups.

C. Use selected methods of diagnosing instructional groups.

If these broad objectives are achieved, the student should, for example, be able to do the following:

A. Describe the conceptual frame of reference he would use in analyzing an instructional group with regard to its social structure.

B. Use appropriate diagnostic tools in describing an instructional group's social structure.

V. Modular Activity Flow Chart: See Figure 7.2.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.

c. Proceed to the post-test or following module.

2. A seminar would be used to orient students to the module. This orientation would be as complete as possible in detailing module objectives and activities. At this time, students would be assigned to read selected materials.

3. The major purpose of the first reading assignment would be to acquaint the student with a conceptual basis for the study of the classroom group as a social system. At this writing, Chapters IV ("The Classroom Group as a Unique Social System", by Jacob W. Getzels and Herbert A. Thelen) and V ("The Socio-psychological Structure of the Instructional Group", by Gale Jensen) of The Dynamics of Instructional Groups, The Fifty-ninth Yearbook of the National Society for the Study of Education seem to represent the type of material which would be appropriate.

4. The second of the seminars would center around a discussion of the student's reading and related issues which emerge. Focus would be on the development of a general framework and working vocabulary which provides a foundation for the student's work in this and the other PST modules. The emphasis here would be on a rather global approach.

5. The second reading assignment would have the student examine certain specific process dimensions of group instruction e.g., group climate, group norms, group goals, and the like. Chapter VI ("Socio-psychological Processes of Group Instruction" by Jack P. Gibb) of the Dynamics of Instructional Groups would be quite appropriate for this purpose.

6. The next seminar would focus on the student's reading which was concerned with process dimensions. There students would concentrate on the whole-part relationship which emerges from an examination of these new data in light of the conceptual frameworks which have been developed earlier. At the end of the seminar, students would be assigned to view video tapes of selected instructional group interaction.

7. The student would view a series of video taped classroom episodes which would clearly depict a variety of selected socio-psychological dimensions, for example, contrasting norm systems, organizational patterns, group climates, and communication systems. Students would be encouraged to take notes relevant to their observations. The student would be given the option to view the tape or parts of the tape as often as he likes.

8. During the fourth seminar, the central task would be to discuss student reactions to the video tape in terms of the

generalizations the student had formed on the basis of his earlier reading and the first seminar.

9. The third reading assignment of the module would focus on diagnostic tools appropriate for analyzing social aspects of the classroom group. Chapters II and III of Diagnosing Classroom Learning Environment by Fox, Luszki and Schmuck, typify the kinds of reading material appropriate to this focus.

10. Discussion of the students' reading regarding diagnostic tools would provide the central task for the fifth seminar of the module. Here students would be expected to discuss their perceptions of the teacher's use of these tools in analyzing the classroom social system. It is expected that students would deal with this aspect in terms both conceptual and practical.

11. The student would view a series of classroom episodes very similar to those presented in the module's earlier video tape viewing activity, and would practice analyzing these episodes using the diagnostic skills they have just acquired. Again the student would have the option of viewing the tape as often as he wishes.

12. The sixth seminar of the module would provide an opportunity for students to discuss and compare their analyses of the video taped episodes they have just viewed.

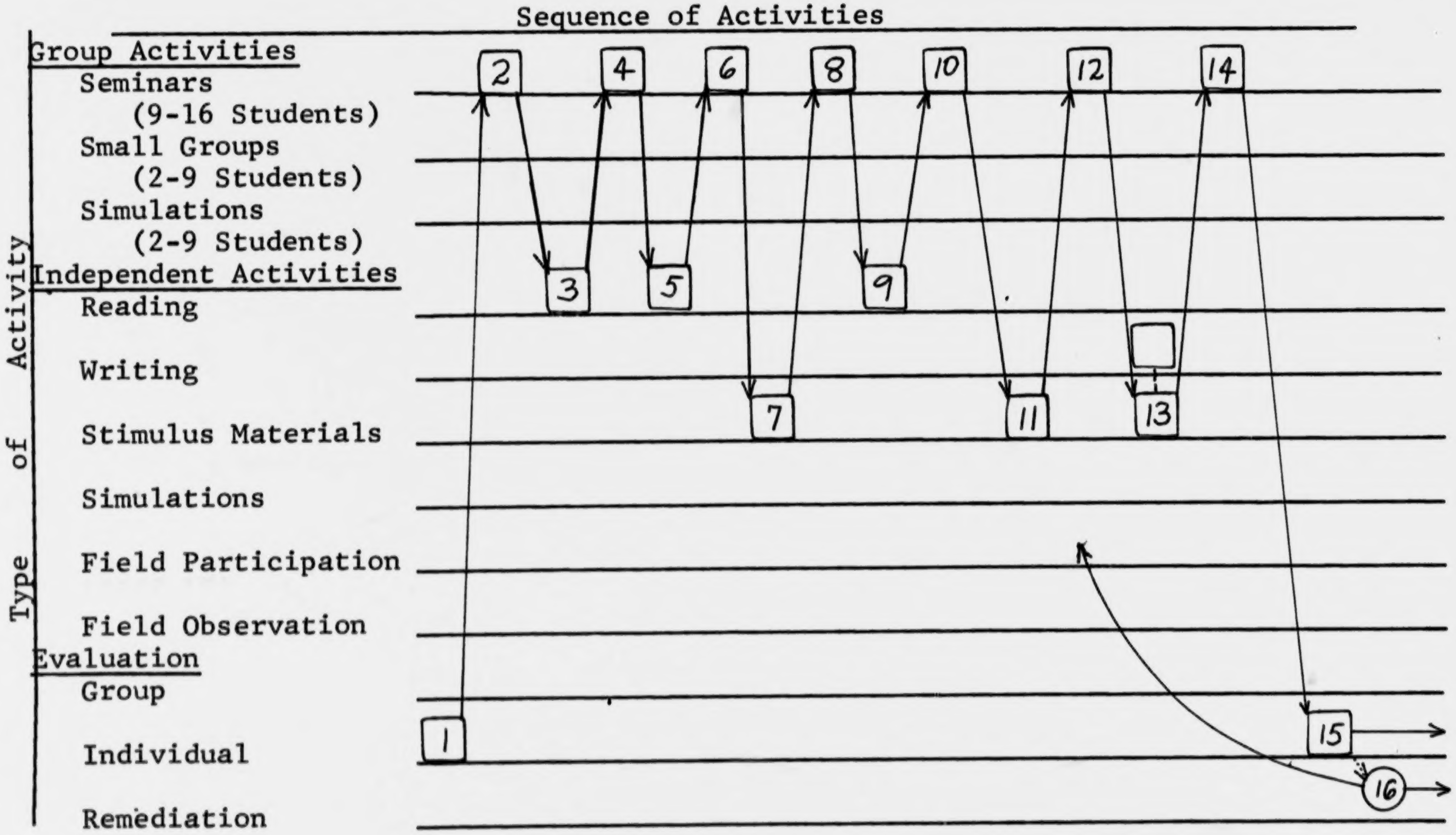
13. Each student would view and analyze a series of video taped classroom episodes similar to those earlier in the module. The student would be expected to write a paper (to be read by the faculty seminar leader and discussed at the following seminar) in which he would describe--in detail and in socio-psychological terms--the classroom episodes he has just seen. It is fully expected that this would provide the student with an opportunity to integrate his understandings and skills relevant to describing and analyzing classroom social dimensions. In addition, the paper might provide one indication of the student's level of achievement with regard to the goals of the module.

14. The final seminar of the module would focus on the papers students will have written. The students and the faculty member would discuss and react to the papers with special attention directed toward similarities and dissimilarities.

15. Post-test to determine if the student should:
(a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

16. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart PST-2
Figure 7.2


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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PST-3: Classroom Social-Emotional Climate

I. Prerequisites: PST-2.

II. Placement of Module: Junior, pre-professional year.
As with most of the other modules in this component, the student would decide when it would be most appropriate for him to take this module. However, it is expected that most students would take this module just after the completion of PST-2 and about the same time as TTP-2.

III. Estimated Time: Student time--20 hours.
University faculty time--10 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general purpose of this module is to increase the student's understandings and skills with regard to social-emotional dimensions of instructional groups. The general objectives of this module should prepare the student to do the following:

A. Describe the social-emotional parameters of classroom groups.

B. Discriminate between types of classroom social-emotional climates and note the effect each has on the group's functioning.

If these broad objectives are achieved, the student should, for example, be able to do the following:

A. Identify the social-emotional dimensions depicted in a simulated classroom experience.

B. Describe in writing the social-emotional climate he perceives to exist in a simulated classroom experience.

V. Modular Activity Flow Chart: See Figure 7.3.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. The initial seminar of the module would serve as an orientation period for the student. At this time, students would

be informed of module goals, activities, requirements, and options. In addition, students would be given a reading assignment and a video tape viewing assignment.

3. The purpose of the first reading assignment would be to provide the student with a theoretical basis with regard to social-emotional dimensions of classroom interaction. Certain selected portions of Understanding Classroom Social Relations and Learning by Fox, Lippit, Schmuck, and Van Egmond, represent the kind of material which might be appropriate.

4. The student would next view video taped classroom episodes containing exemplars of various social-emotional dimensions. The student would be expected to compare his observations with the generalizations he has formed on the basis of his reading. The student could see the video tape as often as he deems necessary.

5. The second seminar would provide the student with an opportunity to discuss his reading and video tape viewing experiences. The development of generalizations about the social-emotional dynamics of instructional groups would be the major student task.

6. The second reading assignment would concentrate on information about instruments and methods used in diagnosing classroom social-emotional climates. Chapter IX ("Diagnosing and Utilizing Social Structures in Classroom Learning" by Ned A. Flanders) of The Dynamics of Instructional Groups and selected portions of Diagnosing Classroom Learning EnvirOments by Fox, Luszki and Schmuck, are typical of the type of reading materials which might be useful here.

7. The third seminar of the module would focus on the student's perceptions regarding the use and usefulness of the teacher's diagnosis of social-emotional classroom dimensions.

8. The student would observe and analyze a video tape of selected classroom episodes featuring social-emotional climate aspects. It is expected that the student would identify and describe those social-emotional dimensions to which he ascribes greatest importance on the basis of his preceding reading and discussion.

9. The student's task during the fourth seminar would be to discuss and compare his analysis of the preceding video tape.

10. The student would view and analyze a video tape containing a series of classroom episodes similar to those he has seen earlier in the module. The student's major task would be to write a paper in which he would analyze the episodes he

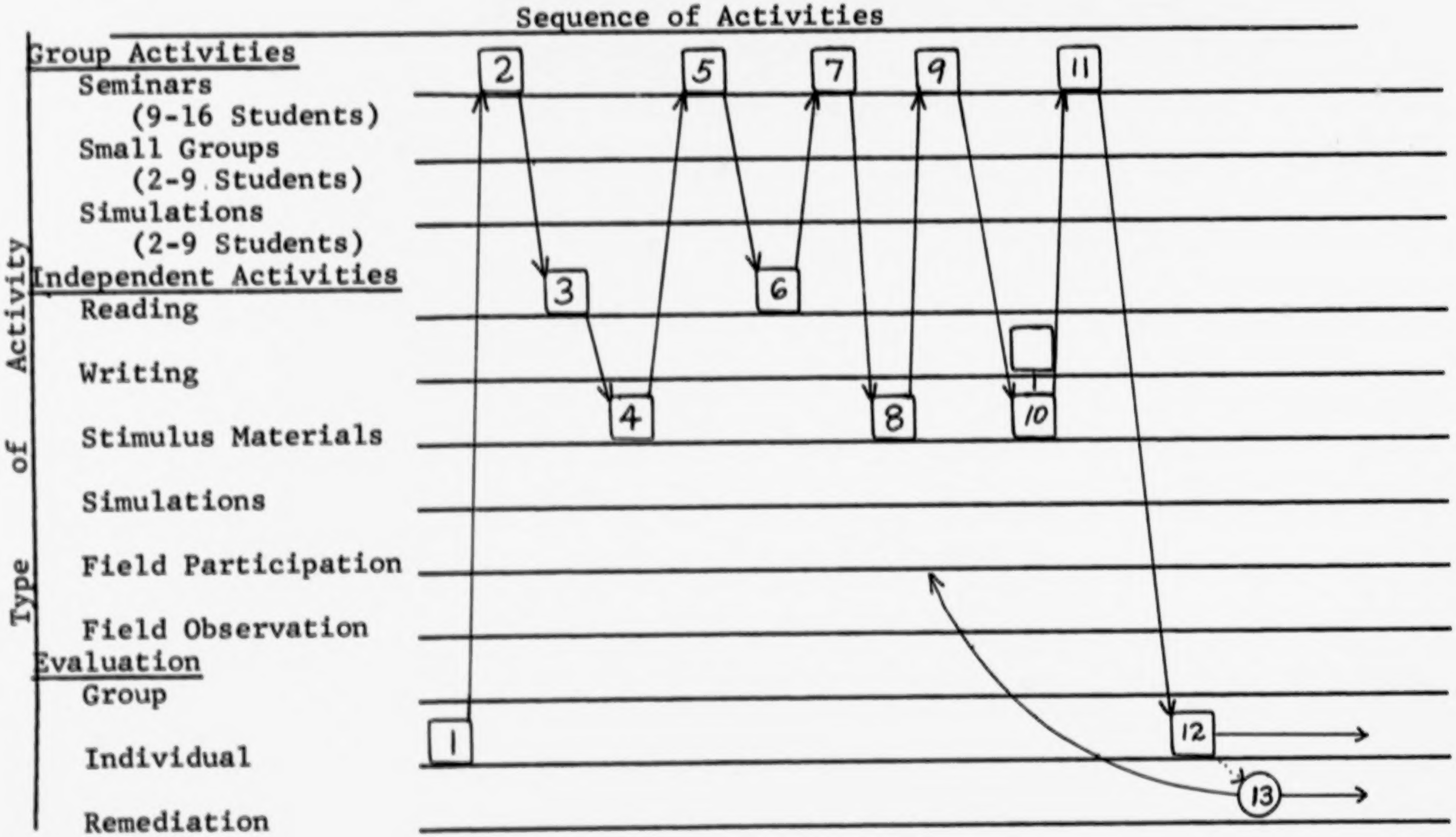
has just observed. This paper would be submitted to the faculty seminar leader who would read, comment on, and return the paper to the student prior to the seminar meeting which follows.

11. The last seminar of the module would provide students with the opportunity to discuss and react to each other's papers. This should have the effect of sharpening the student's perceptions of social-emotional climate factors.

12. Post-test to determine if the student should:
(a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

13. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart PST-3
Figure 7.3


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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PST-4: Teacher Values and Pupil Norms

I. Prerequisites: PST-2.

II. Placement of Module in Program: Junior, pre-professional year. The student is given the responsibility of taking the module when it is of most benefit to do so; the student's faculty advisor would provide assistance in this decision-making. It is expected that a majority of the students would take this module at around the same time as SCF-1.

III. Estimated Time: Student time--24 hours.
University faculty time--8 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general purpose of this module is to increase the student's understandings and skills with regard to the interplay of teacher values and pupil norms in instructional settings. The general objectives of this module should prepare the student to do the following.

A. Describe the parameters of teacher norms and pupil norms in instructional group settings.

B. Recognize that teacher values and norms are often quite different from the values and norms held by pupils.

If these broad objectives are achieved, the student should, for example, be able to do the following:

A. Describe his philosophy of instruction in terms of his norm system.

B. Identify situations in which teacher and pupil norms are in conflict and situations where they are congruent.

C. Describe teacher behaviors which are most likely to resolve certain types of teacher-pupil conflict situations.

V. Modular Activity Flow Chart: See Figure 7.4.

VI. Description of Instructional Activities

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. The initial seminar of the module would be intended to orient

the student to the objectives, requirements, and activities of the module. An attempt will be made to point out relationships of this module with certain of those in the first Social-Cultural Foundations module group. Also at this time, students would be assigned selected readings and would be given a video tape viewing assignment.

3. The reading assignment would focus on the concept of teacher and pupil norms. Chapter VII ("Structional Characteristics of Norms" by Jay M. Jackson) in The Dynamics of Instructional Groups typifies the kind of material which might be appropriate. (It is assumed that students will have read or will be reading Kozol's Death at an Early Age, a CF-1 requirement.)

4. The student will next view a series of video tapes of classroom episodes which clearly feature situations in which teacher and pupil values are in conflict, and situations in which they are congruent. The student will be expected to describe the values at work in the situations, and explain his perceptions of potential consequences.

5. Students in this seminar would devote their time to discussing and comparing their perceptions of the video taped episodes they would have just observed. They would do this in terms of the background information provided by the reading materials read prior to the viewing.

6. Materials like those in Chapters IV and VII of Diagnosing Learning Environments by Fox, Luszki, and Schmuck, 1966, would provide the stimulus for this reading period. Students would be concerned with diagnostic tools which teachers might use in assessing pupil norms and their own.

7. This seminar would be intended to lend clarity to the notion of assessing teacher and pupil norms so as to improve instruction.

8. The student would have two major tasks for this activity: (a) he would view a video tape much like the earlier one, and would analyze its content with regard to teacher and pupil norms and values, and (b) he would prepare a paper which would describe his analysis in some detail. This paper would be reacted to by the faculty leader of his seminar and returned to the student prior to the last seminar of the module.

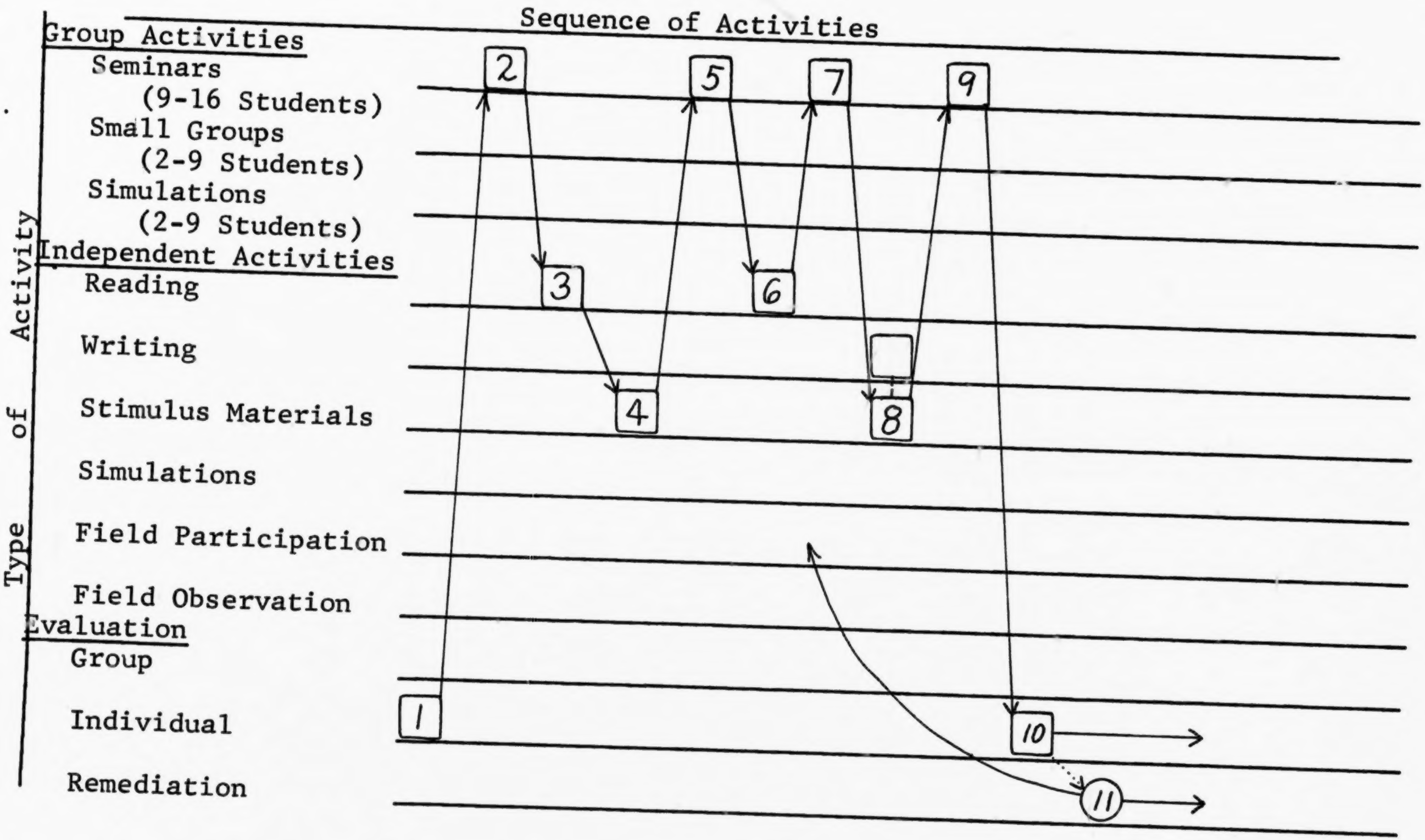
9. The final seminar of the module would give students an opportunity to talk about their papers and listen to the reactions of the group and the faculty seminar leader. It is intended that this activity would help students to better understand the effect of teacher and pupil norms on classroom

interaction.

10. Post-test to determine if the student should:
    (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

11. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart PST-4
Figure 7.4


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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PST-5: Teacher Role, Behavior, and Style

I. Prerequisites: PST-2.

II. Placement of Module: Junior, pre-professional year. The student would have the option to take this module at that point in time when he feels it would be most beneficial for him to do so. It is probable, however, that most students would take the module after the completion of PST-3 and around the same time as TTP-4.

III. Estimated Time: Student time--36 hours.
University faculty time--10 hours.
Clinical Professors and Clinical Teachers time--1 hour.

IV. Operational Objectives: The general purpose of this module is to increase the student's understandings and skills with regard to the teacher's role, behavior, and style. A major portion of the student's instructional time would be spent in developing interaction analysis skills and the concepts concomitant to that development. The general objectives of this module should prepare the student to do the following:

A. Use interaction analysis to categorize and analyze teacher classroom behaviors.

B. Interpret interaction analysis data with regard to patterns of teacher behavior, teacher role, and teacher style.

C. Perform specified teacher behaviors in role-playing and micro-teaching situations.

If these broad objectives are achieved, the student should, for example, be able to do the following:

A. Categorize teacher behavior in accordance with an interaction analysis scheme.

B. Discriminate different patterns of teaching on the basis of interaction analysis data, and perform the behaviors which compose certain patterns.

C. Discriminate, describe and perform the teaching behaviors which characterize various teaching styles.

V. Modular Activity Flow Chart: See Figure 7.5.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. The module's first seminar would be devoted to orienting the student to the objectives and requirements of the module. At this time, the student would be assigned to read selected materials and to view a video tape.

3. The student would read selected materials which deal with the inter-related topics of teacher role, teacher behavior, and teacher style on a conceptual level. At this writing, the best examples of this type of material are found in Chapter III "Role Functions of the Teacher in the Instructional Group" by William Clark Trow and Chapter VIII "Characteristics and Functions of Leadership in Instructional Groups" by David H. Jenkins of The Dynamics of Instructional Groups.

4. The student would next view a video tape which would present him with a series of classroom episodes depicting a wide-range of clearly identifiable teacher roles, behaviors, and styles. The student's task would be to characterize his observations with general descriptions about what he has seen in relation to the reading he has just completed. The student would be free to see the video tape as often as necessary.

5. The second seminar of the module would focus on discussing the readings and observations of the students. The major goal would be to have students develop sufficient insight with regard to the topic as to read them for the interaction analysis training which would follow.

6. During the second reading period, the student would be exposed to two types of materials: (1) materials which suggest ways in which the teacher can analyze his own classroom behavior, and (2) an interaction analysis training manual. Chapter V of Diagnosing Classroom Learning Environments by Fox, Luszki, and Schmuck, 1966, would be appropriate for the first task and The Role of the Teacher in the Classroom by Amidon and Flanders would be appropriate for the second.

7. This part of the module would represent the major activity of the module. The student would work through a programmed training experience intended to train the student to use interaction analysis in analyzing teacher behavior. The usual skills appropriate for this process would be developed in each student, that is, at the end of this instructional activity, the student would be able to categorize teacher behavior with sufficient reliability to build and interpret matrices accurately.

8. The focus of the third seminar of the module would be on the student's report experiences with interaction analysis. Students would discuss the various ways in which its use might be helpful to both beginning and experienced teachers.

9. In triads (teacher, student, and interaction analysis observer), students would role-play various patterns of teacher and pupil behavior. It is expected that this would give the student role-playing the teacher a "feel" for the various behaviors he is asked to play. It would also give the observer an opportunity to "tally live" and the role-playing pupil an opportunity to "feel" the effect that various teacher behaviors have on him.

10. The fourth seminar would center around the students' role-playing experiences with the intent that these be clarified both at a cognitive and affective level.

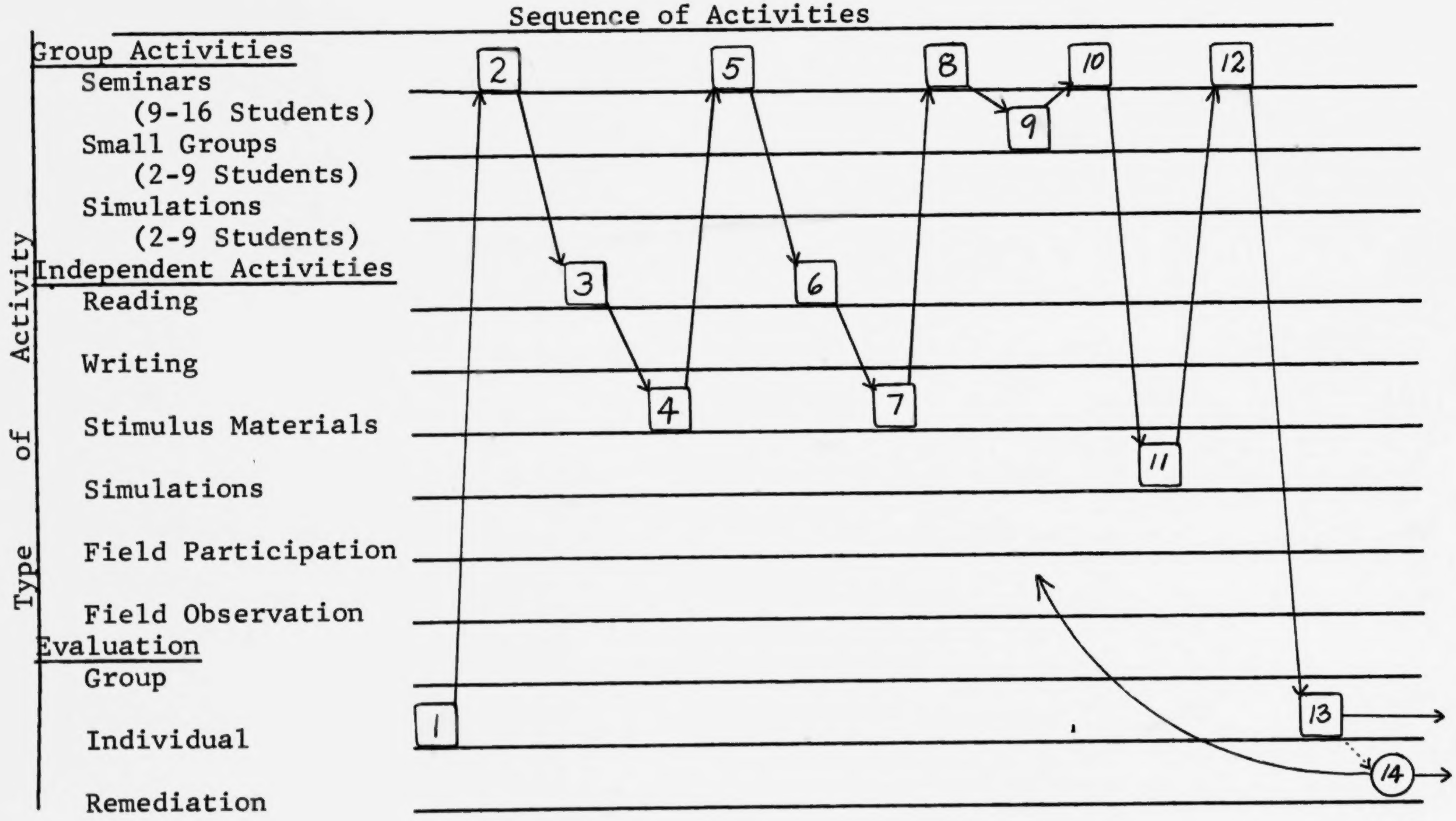
11. Each student,in consultation with his clinical teacher, would prepare and teach a 10-minute lesson using one of the major teaching strategies he has learned in the programmed instruction in the interaction analysis. The lesson would be taught to a small group of students at the Tutorial and Micro-teaching Center. He would then analyze his video tape using interaction analysis. The student would next write a paper which would examine his lesson objectives and his behavioral intentions in light of the behavior he exhibited during the micro-teaching experience. The paper would provide a basis for discussion in the seminar which would follow.

12. During the last seminar of the module, students would discuss their papers on their first micro-teaching experience. Both cognitive and affective concerns would be dealt with, and the seminar should be open-ended with regards to time.

13. Post-test to determine if the student should:
(a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

14. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart PST-5
Figure 7.5


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
1
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3
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PST:-6: Teacher-Pupil Interaction

I. Prerequisites: PST-5.

II. Placement of Module: Junior, pre-professional year. Around the same time as TTP-7.

III. Estimated Time: Student time--20 hours.
University faculty time--6 hours.
Clinical Professor and Clinical
Teacher time--0 hours.

IV. Operational Objectives: The general purpose of this module is to increase the student's understandings and skills with regard to the dynamics of teacher-pupil interaction. The general objectives of this module should prepare the student to do the following:

A. Use interaction analysis to categorize and analyze teacher-pupil classroom interaction.

B. Recognize that various types of teacher behavior influence pupil behavior in different ways.

C. Perform specified teaching behaviors in simulated classroom settings.

If these broad objectives are achieved, the student should, for example, be able to do the following:

A. Categorize teacher-pupil interaction using an interaction analysis observation system.

B. Interpret patterns of teacher-pupil interaction on the basis of interaction analysis data.

C. Perform the teaching behaviors which characterize various patterns of teacher-pupil interaction.

V. Modular Activity Flow Chart: See Figure 7.6.

VI. Description of Instructional Activities.

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. The first of the seminars in the module would be intended as an orientation period. It would be important that students see this module as an extension of PST-IIc, and they will be called upon to

use the understandings and skills gained from the earlier module. In addition, goals and requirements would be detailed. Students would also receive a reading assignment and a video tape analysis assignment at this time.

3. Students would read selected materials dealing with the dynamics of teacher-pupil interaction. Given the previous examples of appropriate materials, the student would review Chapter IX of *The Dynamics of Instructional Groups* from PST-IIb and Chapter V of *Diagnosing Classroom Learning Environments*. In addition, the student would read from selected works of Gallagher and Aschner, Bellack, Hughes, and Taba as they deal with teacher-pupil concerns.

4. Students would observe--and analyze using interaction analysis --a series of teacher-pupil video taped classroom interaction situations. They would then observe the video tape for a second time and re-analyze the situations with particular attention to pupil behaviors in response to teacher behaviors: (the student would be expected to use the ideas of one of the aforementioned educational researchers in the process). For example, he might look at the situation with an eye toward validating his understanding of Bellack's "rules of the game" or Taba's levels of cognitive functioning. The student would also take notes as to enable him to discuss his observation at the following seminar.

5. The second seminar would provide students with an opportunity to discuss and compare their observations with the intent that their understandings relevant to teacher-pupil interaction should become clearer.

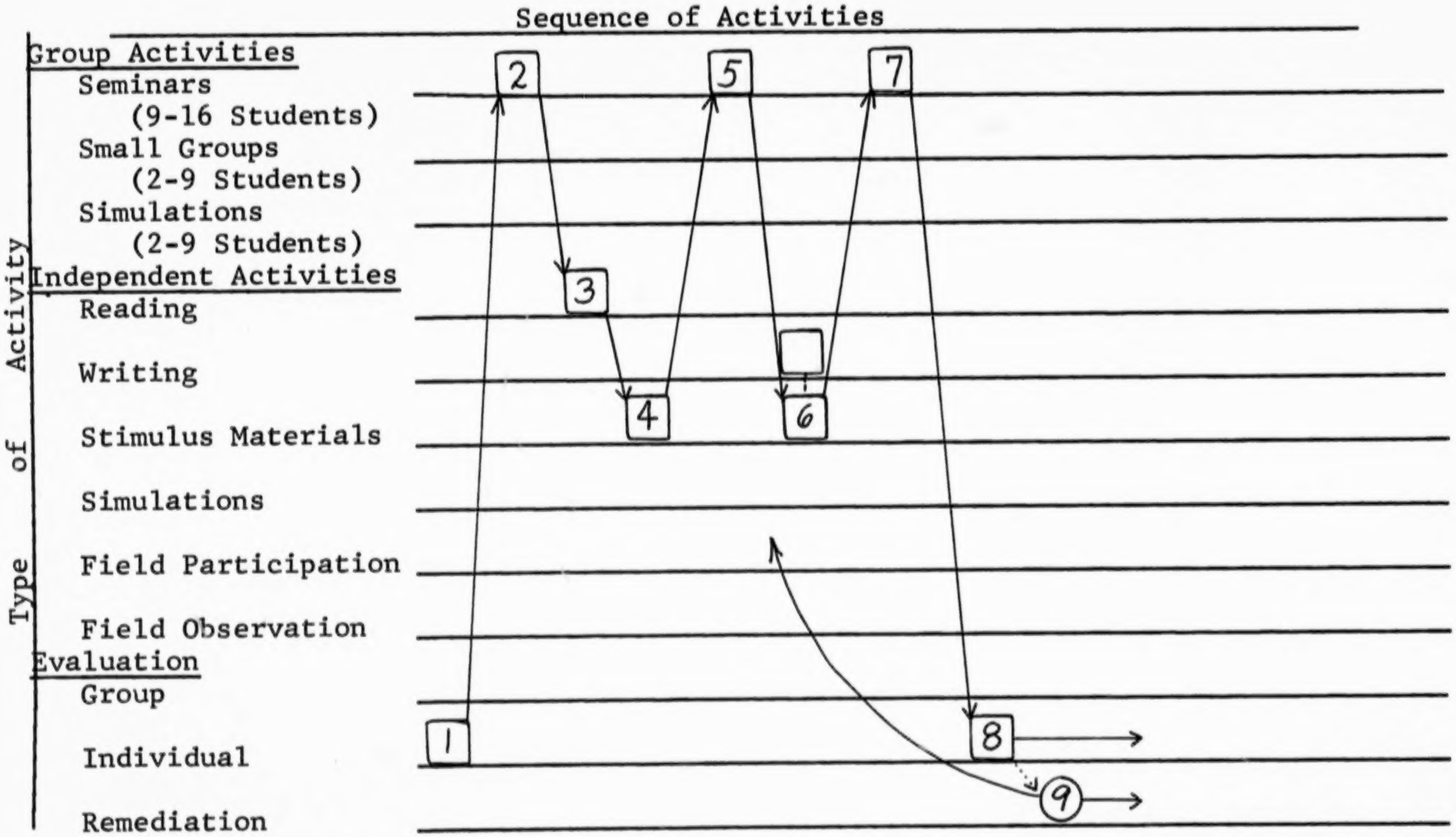
6. The student would next view and analyze a video tape similar to the one earlier in the module. He would prepare a paper which would detail his analysis (interaction analysis results and those results from his use of categories from the framework of a system which is more pupil behavior-oriented). The student would submit this paper to the faculty seminar leader who, having reacted to it, would return the paper to the student prior to the next and last seminar of the module.

7. The concluding seminar would afford students the opportunity to discuss and react to each others' papers with regard to teacher-pupil interaction dimensions. It is expected that this experience would help the student to clarify his thinking about this area of concern.

8. Post-test to determine if the student should:
   (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

9. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart PST-6
Figure 7.6


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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PST-7: Increasing Awareness of Self as a Member of the Educational System.

I. Prerequisites: PST-6, and SCF-3.

II. Placement of Module: Senior, professional year.

III. Estimated Time: Student time--27 hours.
University faculty time--3 hours.
Clinical Professor and Clinical
Teacher time--0 hours.

IV. Operational Objectives: The general purpose of this module is to increase the student's understandings and skill with regard to his role as a school faculty member and as a professional within the total educational system. The general objectives of this module should prepare the student to do the following:

A. Describe various patterns of school organization and the teacher's role in each.

B. Describe the various extra-classroom responsibilities which are a part of the teacher's role.

If these broad objectives are achieved, the student should, for example, be able to do the following:

A. Identify in writing the characteristics which distinguish a hierarchical decision-making model of school organization from a participative decision-making school organization.

B. Contrast the teacher's role in a hierarchical decision-making school organization with the teacher's role in a participative decision-making school organization.

C. Describe the extra-classroom responsibilities which might be a part of this teacher role.

V. Modular Activity Flow Chart: See Figure 7.7.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. The first seminar of the module would be intended to orient the student to the objectives, requirements, and activities

of the module. The relationship of this module to CF-8 and CF-9 would be stressed. Students would be assigned to read selected materials and to attend a video taped lecture.

3. The reading assignment will center on information relevant to patterns of school organization. Materials should be relatively unsophisticated when compared to books and articles one usually finds used in educational administration courses.

4. The student would attend a video taped lecture which would focus on the teacher's role in various patterns of school organization. Special attention would be given to a comparison of hierarchical decision-making models and participative decision-making models. It would be expected that the student would take relevant notes which he might use in the seminar following the lecture.

5. The second seminar would provide a setting in which students would discuss their reading and the lecture. It is also assumed that they would bring in relevant points from their experiences in the Cultural Foundations modules. Students would be expected to keep the classroom teacher as the focal point of these discussions.

6. The second video taped lecture would center on the role of the teacher in the school but outside of the classroom setting. Topics considered would include the role of the teacher as a policy-maker, as a curriculum builder, and as an instructional team member. Again students would be asked to note questions they would like to raise in the seminar.

7. The major student task during this seminar would be to focus on the types of extra-classroom responsibilities teachers have as a part of their role.

8. This video taped lecture would deal with the role of the teacher in the total educational system. It would examine the organizational relationships of various educational agencies and the role the teacher plays in each.

9. This seminar would provide a setting in which students would react to the notions expressed in the preceding lecture. Again, the task would be to focus on the teacher's role. Students would be assigned a paper which would be discussed at the final seminar of the module.

10. The student would write a paper in which he would describe the various extra-classroom roles which the teacher plays and the organizations and organizational patterns within which these roles are played. The student would submit his paper to the faculty seminar leader who would criticize the paper and return it to the student prior to the last seminar.

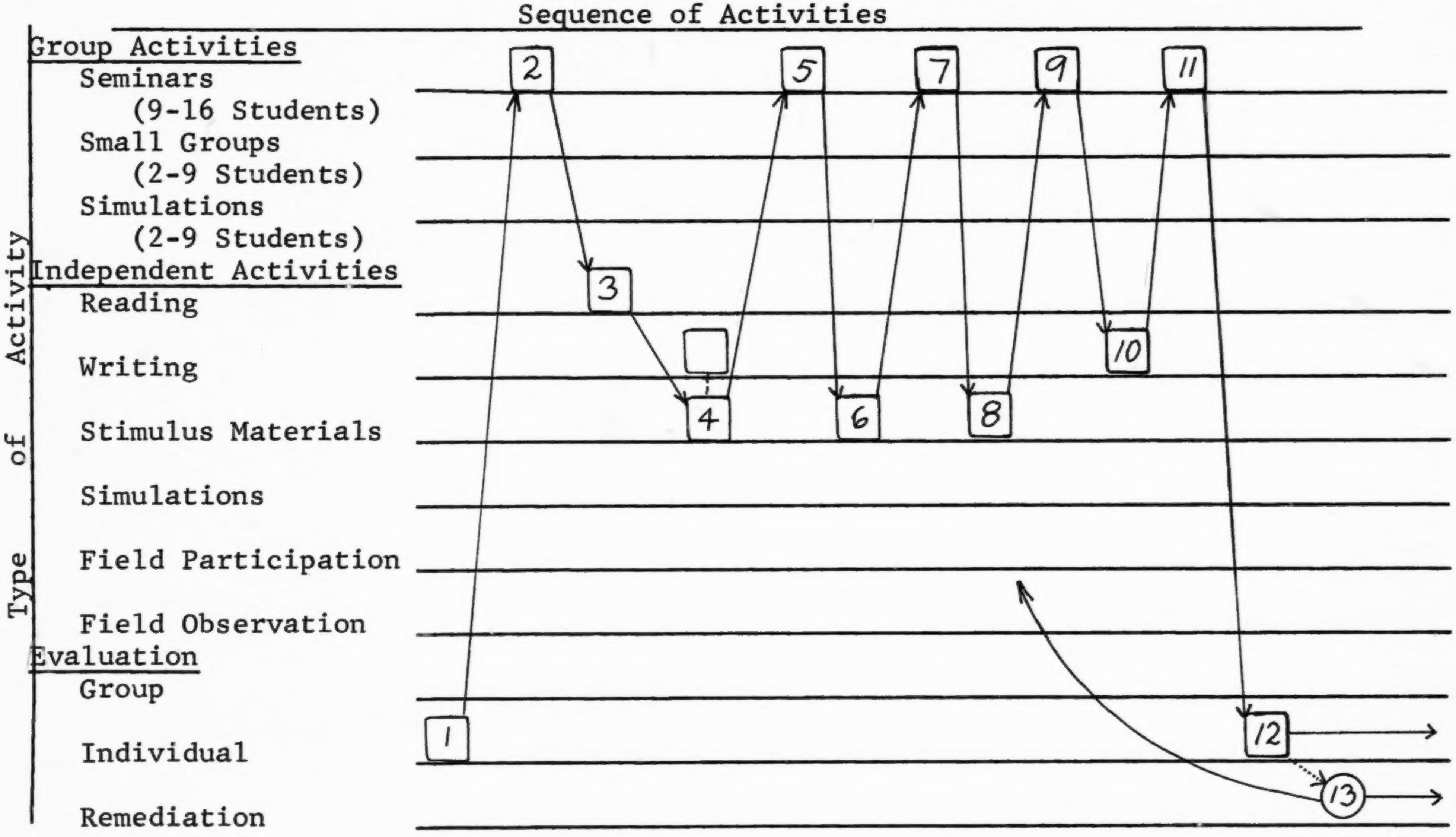
11. The final seminar of the module and component will set the stage for student discussions of their papers. They and the faculty seminar leader will react to each of the papers.

12. Post-test to determine if the student should:
(a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

13. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart PST-7

Figure 7.7


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
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Remediation
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CHAPTER 8

SOCIAL-CULTURAL FOUNDATIONS COMPONENT

Rationale

The Subject Matter

The phrase, "social-cultural foundations of education", though often used, is by no means clear. In this document the phrase will be taken to mean the application of the content and methods of inquiry from certain fields to educational problems. These fields are sociology, anthropology, political science, economics, and philosophy. The disciplines from which this component will draw most heavily are sociology and philosophy.

Traditional Role of Social-Cultural Foundations

The role of social-cultural foundations in the preparation of teachers has been a matter of dispute for some time. The superficial agreement that teacher preparation programs should include some attention to the social and cultural foundations does not make explicit what it is that the field is to contribute. In any case, there seems to be an assumption that the social-cultural foundations field has the potential of adding something important to the education of teachers. It is believed that this "something" is not provided by either the general liberal education or the more technical courses in methods taken by prospective teachers.

There have, of course, been many claims concerning the contributions of social-cultural foundations. Perhaps the most common of these is that in applying the methods and content from disciplines such as sociology or philosophy to education, students learn to "relate theory and practice". Yet, there is disagreement about what such relating is, and how one might proceed to bring it about. Whatever contribution is claimed, two common approaches which supposedly produce that contribution, have been used.

One approach has been to select some "sub-fields" within the social-cultural foundations rubric, and offer courses in those fields, e.g. philosophy of education, history of education, and sociology of education. In some institutions a course in a specific sub-field, such as philosophy of education or history of education, is required of all teacher candidates. In other institutions courses are offered in the several sub-fields, and students select the particular course they prefer as a part of their training. This latter approach was recommended by Conant in The Education of American Teachers. (28a)

A second common approach may be called the "educational problems approach". In this approach, courses focus on problem areas in education, and draw from any relevant discipline thought helpful in resolving the problem. In contemporary jargon this would be called an "interdisciplinary" or "multi-disciplinary" approach. Some educators have argued that education itself is, or can become, the discipline. Hence, "subject matter" should be organized around educational problems rather than merely applied to them. In any event, the problems approach to social-cultural foundations is wide-spread, and many institutions require such courses for those preparing to teach. Common titles for such courses are "School and Society" or "The School in the Social Order".

There are some serious unresolved problems with each of the above approaches. Knowledge tends to be fragmented within the "sub-field" approach. Prospective teachers are asked to view schools from the vantage point of a particular discipline. In so doing they tend to see only a part of any educational problem, i.e., from the perspective of a single discipline, one does not see problems in terms of "wholes" with which the practicing teacher must deal. On the other hand, the global perspective of the problems approach may slight the skills and deeper understanding of the aspect of the problem which could be provided for by the "sub-field" approach. The model developed herein is an attempt to ameliorate these problems. This can be accomplished by replacing the concept of courses with the more flexible concept of modules. Rather than either/or--disciplinary approach or problems approach--the "modularized" program can adopt a both/and attitude--both the discipline approach and the problems approach. Whichever approach seems most promising for a particular module can be used.

This matter of organization however, is not the most serious unresolved problem. A more serious problem is the striking lack of agreement about what any approach or organization has to offer the education of teachers. The purpose here is not to resolve that controversy, but rather to make clear what contribution the Social-Cultural Foundations Component is expected to make in this program and why that contribution is held to be important. It is to this matter that we now turn.

Social-Cultural Foundations in This Model

Although there is diversity of opinion regarding what constitutes good teaching, teaching competence is evaluated, and the evaluation is generally based on a rather narrowly defined notion of professional competence. To put this another way, the practicing teacher is likely to be evaluated on the basis of technical skills and the ability to "manage" a classroom. Once competency is defined in terms of technical skills, what the teacher may have learned in cultural and social foundations seems to have little relationship to "professional" competence. Although it is widely asserted that such courses "relate theory and practice", and although there is a general notion that such courses are needed by prospective teachers, the relationship between that which is learned and that which teachers do is seldom, if ever, clearly developed.

The Cultural and Social Foundations Component of this proposed Model Elementary Teacher Program is based upon four basic assumptions:

1. Professional competence of elementary teachers should be broadly defined to include the understanding of social and cultural factors which affect students, teachers, and schools.

2. Some of the skills used by philosophers and social scientists could be learned by teachers, and would be valuable additions to a teacher's technical skills.

3. The technical competence of teachers can be supported and enhanced by a better understanding of the socio-cultural milieu in which the teacher functions.

4. Teaching is a value-laden task, and teachers should develop skills and be given practice in analyzing value questions and making value decisions.

These assumptions are not universally accepted. A brief rationale follows for their acceptance in this program.

What competences do understandings and skills of cultural foundations generally claim to produce, and how might these be evaluated? First, it should be noted that some distinctions about "kinds" of education may mislead, e.g., distinctions between liberal and professional education or between general and specialized education. Work in social-cultural foundations is neither clearly "liberal" nor clearly "professional". Neither is it clearly general nor clearly specialized. In part, it can perhaps be viewed better as an extension of liberal or general education for professionals in education. This view is necessary because of a weakness in most general education programs, that is, students are seldom encouraged to study and reflect upon either the role of formal education in our society or the role of educational agencies other than schools. Certainly any adequate program of general education would include careful attention to all of the basic social institutions. Schools are increasingly moving to center stage in American society; never before has the impact of schooling on the lives of citizens been as great as it is today. However, this importance is not reflected in the curricula of our schools and colleges; the school remains, for the most part, an unstudied institution. Thus, for the prospective teacher, general education is something studied out of context. The assumption seems to be that while students are learning within schools, they are also learning all they need to know about schools. There is sufficient indirect evidence to make us doubt the tenability of this assumption. Although education about our schools is needed by all, it is most needed by those who hold the office of teacher, for the decisions of teachers and others involved in the formal schooling process increasingly determine the life chances of children. Thus, the notion of teacher competence is in this model extended to include this aspect of "general education".

Not to so extend the limits of teacher competence would be a disservice to the society and a danger to its children.

In claiming that teacher competence should include such things as knowledge about and understanding of the social-cultural milieu or skills in analyzing value questions, it is not being asserted that the relevance of such knowledge and skill would be clearly perceived and reflected in the *technical* proficiency of the teacher. When the concern is wholly with technical proficiency, there may be a tendency to deny that such knowledge and skill have any relevance. There are several reasons for this, for example, educational problems in this component will be viewed as *intellectual* problems to be analyzed and reflected upon. The same problems are likely to be viewed by the teacher-practitioner (and also by many of those who evaluate these teachers) as being primarily practical, as questions which call for action rather than thought and reflection. Now clearly, the problems a teacher faces *are* practical problems and *do* call for action, and one can understand the student or the practicing teacher who is impatient with those who insist on dealing with the intellectual ramifications of those problems. However, to deny that the problems are intellectual as well as practical is to deny the relevance of social-cultural foundations. There is, however, no argument here that the teacher's actions in a practical situation should not be evaluated on the basis of technical skill. The point to be made is simply that the evaluation of the teacher as a technician is *not sufficient*. The competence of the teacher whom we wish to prepare includes skills and knowledge in addition to narrow technical competence. In short, the position taken in this model is that competence includes many things which go beyond and indeed may support narrow technical competence. Thus, the competent teacher, as described in this model, recognizes that the *practical* and *intellectual* aspects of problems are not mutually exclusive. He knows that although it may not be possible to reflect and study before acting in a classroom, reflection is necessary in order to evaluate his actions intelligently.

Perhaps an additional example will make the above point clearer. What generally, are the concerns or criteria when a teacher is evaluated? Often the one who evaluates, whether it be a supervisor, colleague or the teacher himself, is concerned with such things as the teacher's "control" of the class, motivation, student achievement, etc. Evaluation would rarely involve an assessment of the teacher's understanding of social forces which affect both school and student, the value conflicts, or the teacher's ability to explain to himself or others *why* students behave as they do, etc. Yet, given a teacher who is technically competent, it is precisely these understandings which increase the likelihood that his decisions will be just and appropriate. Without this, the more he succeeds the more he may fail. The conception of teacher competence can be extended to include these things, and such an extension is being recommended here. However, with such an extension, it should be clear that the evaluation itself must also be extended beyond mere observation of teacher behavior in a classroom situation.

It should also be made clear that a student can understand all of these additional things--all of the things taught in a social-cultural foundations course which are intended as an extension of general education for professionals in education--and yet not succeed as a teacher-practitioner. The attainment of the cognitive goals of such work in no way guarantees success in the practical activity of teaching, nor does success in the practical activity mean that the individual has the cognitive attainment of the social and cultural factors affecting education. One can do the "right" thing for the "wrong" reason or for no reason at all. In short, one of the goals of work in social-cultural foundations is intellectual, i.e., the goal is a kind of learning that might generally be called "knowledge acquisition" rather than "skill acquisition" or "norm acquisition". The knowledge thus acquired is relevant for teachers, and is here included as a part of teacher competence. It does not, however, lead necessarily to the acquisition of technical skill--but what does?

In addition to, and integrated with the "intellectual problems" approach, will be careful attention to the normative or value aspects of these problems. Emphasis (for valuing questions) will not be on "right answers", but on developing skills and gaining practice in analyzing value problems and making value judgments. The underlying assumption is that teachers' decisions have value dimensions, and that a teacher preparation program should include an examination of these dimensions as an integral part of the students' training.

The foregoing is not intended as an indication that no attention will be given to technical skill development in the Social and Cultural Foundations Component of this program. The intent is to clearly state that there are major concerns in addition to development of technical skills. One could put all this in another way. If "technical skills" are not too narrowly defined, there are skills of the social scientist and philosopher which could profitably be acquired and used by the teacher. Not enough has been done in this regard, and careful attention will be directed to the problem of identifying and utilizing these skills in this program. In this Model Program, some of the relevant "behavioral" skills are included in the section entitled "Instructional Theory and Practice". In addition to these there are some relevant "cultural" skills which could be drawn from the fields of sociology, anthropology, and philosophy. In philosophy, skills of language analysis and logic are particularly appropriate. In sociology, skills in using sociometric devices, methods of studying groups, etc. would be useful. A clear case of relevant skills used by the anthropologist is found in the work of Spindler (13a) whose methods of studying teachers could be used by teachers to study themselves. Thus, an expansion of the ideas of technical skills beyond the range of such things as techniques of reading instruction, could serve our purpose as well in developing an expanded notion of competence.

The subject matter of the Social and Cultural Foundations Component, therefore, will be drawn from the social sciences and philosophy as content and method from those disciplines are considered relevant for teachers. Concern will not be limited to support and development of technical skills of teaching, but neither will those skills be excluded. In summary, the general goals of the Social Cultural Foundations Component would be to provide experiences which would enable the student to:

A. Understand the social dynamics of educational groups and institutions (the classroom as a group, the school and the school system).

B. Understand the social, political, and economic forces which affect schools and schooling in the United States.

C. Develop skills in the analysis of social situations.

D. Develop skill in the analysis of language as a tool for communication of ideas and influencing the behavior of others.

E. Develop skills in analyzing the value dimension of educational problems and in making value judgments.

Organization of the Component

The Cultural and Social Foundations Component has a minimal input during the pre-professional phase of the program. In fact, this component's role in the pre-professional aspect of the program would be primarily to give beginning teachers enough understanding of the social and cultural dynamics of the classroom and the school as a social institution to make their professional sensitivity training phenomenologically real. The "intellectual problem approach" to the study of education tends to disturb students who are highly anxious about their ability to live with the everyday practical problems of teaching. It is assumed that during the senior professional year this anxiety about their ability to perform adequately as a classroom teacher will be reduced by the "reality testing" furnished by the participant-observer field experiences. (30) At this time the students should be able and willing to "stand back" and reflect upon the educational institution in which they will participate as professionals, upon the forces which shape that institution, and upon the social and cultural factors which influence their own behavior and the behavior of the pupils they seek to teach.

The pattern of increasing the social and cultural foundations input during the senior professional year will be repeated during the later part of the residence year after the students are past the initial anxiety of assuming responsible teaching assignments. Social and cultural foundations work during the residence year will include a major focus on the application of skills and understandings to an analysis of the social, economic, and political forces operating in the school system in which the students are teaching.

Throughout the three years of the program, the Social and Cultural Foundations Component would be designed to assist the students in understanding the institution of education in American culture and in addition (in interaction with the other components) assist the student to more accurately: (a) view self in group and organizational interactions, (b) view the teaching act as more than a set of technical skills, and (c) better understand the forces which legislate for and against curriculum and methodological innovations in the elementary school. The Social and Cultural Foundations Component is comprised of five groups of modules. A rationale and overview of each of the five modular groups follows.

MODULE GROUP #1 (Pre-Professional Year)

"Social, Cultural, and Organizational Determinants of Behavior in Schools"

Rationale

The general purpose of the social-cultural foundations "input" during the pre-professional year is to help students become more aware of social, cultural, and organizational determinants of behavior. Although such awareness will be encouraged by other components (sensitivity training and the enabling seminars are examples), some time and effort should be devoted specifically to this awareness. The instructional task is perceived as one of helping students recognize cultural and organizational problems as problems which educators should face; that intelligent, educational, and instructional decisions must take such factors into account.

Prerequisites for the social-cultural foundations pre-professional modules will be the social science courses required in the Liberal Education Component and the early sensitivity training modules. In a sense, the pre-professional cultural foundations modules can be seen as extensions of the sensitivity training. The difference is simply that the Social-Cultural Foundations Component deals with factors which students tend to overlook due to their own "cultural blinders". For example, one glaring kind of "insensitivity" often encountered is that of the student who is perfectly willing to admit the force of cultural factors on the behavior of ghetto children, but at the same time fails to recognize a comparable cultural impact on his own attitudes and behavior. Another example would be the tendency of the student (and others) to "compartmentalize" educational problems. By this it is meant that students often fail to perceive the connection between what they know about the school in American society and what they see around them. It is not difficult to find prospective teachers who know a great deal about stratification, or the psychology of prejudice, or group dynamics, or the problems of minority groups. These same students often find it difficult to apply this knowledge as they attempt to explain to themselves or others what is happening at a P.T.A. meeting, or in a classroom, or in a faculty room discussion. A concern with such application will be central in the pre-professional social-cultural foundations modules.

There will be three social-foundations modules during the pre-professional year. The central element in each of the modules is the seminar. This seminar is also to serve as the mechanism to integrate the modules, and to help students see the process as a whole rather than merely a collection of unconnected, ill-fitting parts. The "stimulus materials" will include readings, video tapes of classroom situations, video taped lectures, films, filmstrips, programmed materials (as they may be developed), structured writing assignments, and evaluation tasks. In addition to frequent evaluations during the module, there will be an opportunity to evaluate student progress at the end of the module. This evaluation will be followed by "remedial work" for those students whose progress is deemed less than satisfactory.

MODULE GROUP #2

"Language, Logic, and the Teacher"

Rationale

Although there is much ado in most programs designed to prepare teachers concerning the development of teaching skills or "tools" of teaching, explicit attention is seldom given to improving the most basic of all "tools" of the teaching art. That basic tool of instruction is, of course, language. It may be argued that no explicit attention need be paid language since language usage is one facility which teacher preparation students have mastered long before enrolling in a teacher education program. There is a superficial plausibility about such an argument. Obviously the teacher in training has developed skill in using language. He understands what others say to him, and the others in turn have little difficulty in understanding what he says. His use of language is not only functional, but by and large it is also technically correct. For all that, the argument still misleads. The students, as well as their instructors, often take language skill for granted, and assume that, when faced with a problem to be solved or an idea to be analyzed, their language tool is "sharp" enough for the task. It is not difficult to show that very often their assumption is not warranted. Classrooms and faculty rooms abound with conversations in which the participants, rather than being masters of the language use, are mastered by the language. For all the talk about producing teachers who are adept at critical thinking, who face their tasks as intelligent decision-makers, etc., we often overlook the fact that "critical thinking" and/or "intelligent decision-making" require a critical use of language. This group of modules is directed to this problem. The purpose here is to look at some basic language facts and skills which very often are not made explicit to teachers in training. The intent of these modules is to help prospective teachers develop some skills in dealing with language and logic in the classroom--skills which are often assumed but not explicitly taught. The assumption that teachers develop these skills automatically by using language, or that they acquire them through some sort of intellectual osmosis, simply does not hold.

This group of modules will be placed in the senior year. (It is assumed that the skills introduced here will continue to be practiced in the following social-cultural foundations modules.) Of the forty-five hours, ten to twelve hours will be live instructional time. Again, the live instruction will occur in a seminar setting. Instruction will be live when it appears to require contextual judgments on the part of the instructor and/or students. As with the first group of modules, the central element in each of the modules in this group will be the seminar. In general, the instructional process in each module will proceed from an orientation seminar to some kind of stimulus material. The stimulus material may be readings, video lectures, films, tapes of classrooms, film-strips, programmed materials, etc. After dealing with the stimulus material, the students will return to the seminar. In the seminar the stimulus material will be discussed, tentative generalizations drawn, questions answered, etc. In short, the seminar will provide the opportunity for initial student response to the stimulus materials, and will provide both student and instructor with feedback. An application assignment will then be given. This assignment will be such that students will be required to demonstrate that they can apply in some new context the concepts and skills which have been discussed and practiced in the seminar. This assignment will be followed by another "feedback" seminar in which weaknesses and mistakes will be diagnosed. This sort of process will be continued to the end of the module. At that point there will be a terminal evaluation and a remediation step for those who require further help.

MODULE GROUP #3 (Senior Year)

"The School and the Teacher"

Rationale

It is assumed that there is a carry over from the pre-professional experiences in Module Group #1 to the senior year Module Group #3. During the interim period the students will have engaged in teaching a variety of contexts. If the present program is to be anything more than an extended apprentice training program, the students will need to know something about analyzing situations so that their decisions will be grounded more strongly than custom frequently allows. Module Groups #1 and #2 are designed to develop a kind of sensitivity to this need and skill in distinguishing the kind of intellectual tools available for fruitful analysis and decision-making.

The school and the schooling process constitute a situation, or rather, a series of situations which the teacher must confront. Unfortunately, categories for the analysis of these situations do not spring forth from the situations themselves. It is entirely possible to work a lifetime in the schools without ever developing even a reasonably helpful taxonomy through which one may see the school or schooling process as a whole.

The school and the schooling process generate a complex set of relationships which are capable of being dealt with in some systematic way. This group of modules is directed to this fact which is at once a problem and a promise. It is a problem because without such understanding, the work of teachers is much closer to random behavior than it is to reasoned action. It is a promise because conceptual tools enable work to be grounded, evaluated and developed rather than merely changed. Thus, there is the legitimate hope that an understanding of ways of conceiving key teacher relationships can enlarge the capacity of teachers to plan, instruct, and evaluate schooling and their part in this process in some systematic way.

This group of modules will be placed in the senior year. Again, live instruction will occur in a seminar setting, and will deal with matters that require contextual judgments on the part of teachers and/or students.

As with the preceding social-cultural foundations modules, the modules in this group will be organized around the seminar. In general, the instructional process in these modules will go from an orientation to the task given in the seminar to working with some sort of "packaged" or stimulus material. This material may be readings, video lectures, films, film-strips, or programmed materials. After the students have used the material, they will return to a seminar meeting where the material will be discussed, concepts will be refined, and students will be given "feedback". Students will then be given an "application" assignment which will require that they practice and/or demonstrate that they can apply, in some new context, the concepts and skills they have been discussing. This assignment will be followed by another seminar where the weaknesses and mistakes in student performance can be treated. This process will be continued to the end of the module group. At that point there will be a terminal evaluation and a remediation step for those who need it (others may be encouraged to undertake additional applications of the conceptual apparatus in problem areas of interest peculiar to their situation).

MODULE GROUP #4 (Resident Year)

"Analyzing the Language and Logic of Instruction"

Rationale

Prior to the resident year, students will have competed Module Group #2 which aims at the development of selected skills with which to analyze and evaluate some aspects of general discourse about education. Also completed will be Module Group #3 which focuses on the teacher as decision-maker and on the importance of social, cultural and organizational factors in making intelligent educational decisions. In this module an attempt will be made to combine these two concerns by focussing on the language and logic of instruction. The assumption here is that teachers can, by analyzing and evaluating the language and logic of instruction, improve the decisions they make about the instructional process. The major purpose of this module group is to help students develop skills of analysis and evaluation.

There are seemingly endless debates as to the actual extent of teacher power. Although contemporary developments make clear the fact that teachers are no longer the "gutless wonders" they were once asserted to be, it is still common in schools of education to hear the student comment to the effect that their instructors' recommendations as to how they should function as teachers are somewhat absurd since a teacher is given little latitude to modify his instructional behavior in a typical public school. The problems of the power environment within which many teachers work should not be minimized. On the other hand, the power teachers do in fact hold, should not be minimized either. Some parts of teacher power are discussed elsewhere in this component, but there is one sort of teacher power which is perhaps the most complete (at least potentially), the most often ignored, and one of the most important. This is the power of the teacher to control his language in the classroom and, in large part, the language of the student. Why this is so often overlooked is not clear, but part of the reason seems again to be that we simply assume that anyone in a classroom teacher's position has sufficient mastery of the language, and hence no specific attention need be paid to it. This assumption is not warranted. Without being encouraged to examine their language, not just occasionally but again and again, the teacher and his students will be likely to be led astray by the language they take for granted.

This is not, of course, the only component which includes attention to language and logic. It possibly is the only component in which explicit attention is given to certain aspects of language and logic. As an example of how concerns in this module group would differ from the language concerns in other components, attention can be directed to the skill of interaction analysis taught and practiced in the Teaching Theory and Practice Component. In interaction analysis the concern is with the emotional climate of the classroom. The importance of this concern can hardly be doubted. Still, it must be pointed out that certain important factors are excluded by current systems of interaction analysis. These systems do not treat the content of the language, nor do they provide any information about the logical appraisal of what is said. The point here is that systems which provide indications of classroom climate are important. Indeed, one might argue that they are necessary in a good program of teacher preparation. Few would argue, however, that such systems provide a sufficient treatment, or sufficient skills for treatment, of the language of instruction. Teachers need to be at least equally interested in the cognitive content and logical form of that language. If the language used at a particular time in a particular classroom is sheer nonsense, it is surely as important that the teacher recognize that fact as it is that he be aware of the emotional climate in that classroom. It is to such considerations that this module is directed. Attempts will be made to acquaint students with the somewhat sketchy literature in the field, to introduce them to various conceptualizations of the language and logic of instruction, and to aid them in developing some basic skills with which they can better control and evaluate their language of instruction.

This group of modules will be placed in the resident year. It should not come too soon during this year since students should first be given sufficient time and opportunity to develop some confidence in their ability as teachers. As with the other module groups, the activities in these modules will be organized around a seminar. Of the sixty hours, approximately twenty hours will be live instruction in a seminar setting. As in the case of the preceding module groups, the activities in the seminar setting will be those which require, or are best performed with, the presence of an instructor who can make contextual judgments and provide students with feedback on the basis of those judgments.

MODULE GROUP #5 (Resident Year)

"Education and Social Problems"

Rationale

This group of modules assumes the successful completion of all the other social-cultural foundations modules. It is also assumed that by the time students begin this group of modules their "survival concerns" in the classroom will be largely satisified. When students begin this module group, they should be able and willing to "step back" from the pressing practical concerns of the classroom, and view seriously some problems which they previously would have regarded as tangential to the institutionalized task of teaching. Put another way, aspirants to a teaching degree and teaching role typically begin by conceiving education as limited to schooling, and the school as an almost autonomous institution. After some experience as classroom practitioners, they may come to consider the impact of other institutions on the work of the school, and the fact that there are many other institutions in the culture which are also educative agencies. Sometimes the impact of these other institutions supports the work of the school, and sometimes it is in conflict with the school, but it is only when the school is seen in the context of this broader social and institutional framework that basic educational problems and policy debates can be understood and sensibly evaluated. A basic assumption of this group of modules is that teachers should understand these problems, that teacher competence should be extended to include an understanding of institutionalized schooling as it affects and is affected by other institutions, other social forces, and the dominant values of the culture.

Previous modules in this component, especially those in Groups #1 and #3, have been designed to heighten students' sensitivities to the role played by social and cultural factors in determining behavior within the school. Module Groups #2 and #4 have been developed to equip the young teacher with some of the tools necessary in order to build, sustain, and evaluate strategies for dealing with educational problems. This group of modules deals with the changing social conditions which are placing a "strain" on the contemporary school. This "strain" must be taken into account in order to understand what is happening to American schools, to evaluate the working of those schools, or to participate intelligently in making policy to guide the operation of schools in the future.

The problems selected for study in this module cannot be determined far in advance; to do so would be to ignore the basic fact of rapid social change. The crucial problems facing schools will change with time, and a teacher preparation curriculum should change accordingly. What is unlikely to change is the rendering obsolete of traditional patterns of schooling by rapid change. It should also be noted that, at any point in time, only some of the crucial problems facing the schools can be included in the curriculum. In sort, the problems dealt with in this module group should be viewed as illustrations of the sort of problems presented in a rapidly changing society; not all of the problems will be the ones selected two or three years from now.

What is being claimed here is that, in preparing people to become teachers, preparation is inadequate unless it includes attention to the social forces affecting education in general and schooling in particular. Students should, in their training program, come to recognize that the fact of rapid social change makes it imperative that they and others concerned with making intelligent decisions about the schools, continue to view social changes in terms of the impact of the social changes on the patterns of schooling. If the best that we can do in teacher preparation programs is to give students the knowledge and skills with which to teach the last generation in schools designed to educate students of an even earlier generation, schooling will become increasingly irrelevant to the lives of students. This group of modules assumes that we can do more.

The general organization of this module group will begin with a module which provides an overview and some sort of conceptual framework with which to view the impact of social change on schools. The general focus in this first module will be on the so-called "technological revolution". Following this will be a series of modules dealing with lower order social changes which are affecting patterns of schooling, e.g., changing patterns of urbanization-suburbanization, emphasis on "social justice" with respect to problems of race and poverty, etc. The final module in the group will be an attempt to look at other social changes which have not been studied in depth, but which call for changes in patterns of schooling.

This group of modules will be placed in the second semester of the resident year. As with the other social-cultural foundations modules, approximately one third of this time will be live instructional time spent in a seminar setting. This setting is selected so that the instructional process can be modified on the basis of contextual judgments on the part of the instructor. The seminar should also facilitate the attempt to make students conversant rather than merely acquainted with the issues at hand.

SCF-1: Social and Cultural Determinants of Children's Behavior in Classrooms

I. Prerequisites: PST-1.

II. Placement of Module: Junior, pre-professional year.

III. Estimated Time: Student time--30 hours.
University faculty time--10 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general objective of this model is to make students more aware of the importance of social and cultural factors on the behavior of children in school. The general objectives of this module should prepare the student to do the following:

A. If asked for the information needed in order to explain the general behavior patterns of a child, include in his answer factors which could be described as social and cultural (e.g., socio-economic and cultural background of the family, value presuppositions of the institutions within which the child is behaving, etc.).

B. If asked to examine and account for his own behavior as a student, would include social and cultural factors in his account (as in A above).

V. Modular Activity Flow Chart: See Figure 8.1.

VI. Description of Instructional Activities: (These activities are included here, and in the remaining social-cultural foundations modules, as illustrations of possible activities. They are not to be viewed as specifications).

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. First seminar of the module: Seminar would be used to orient students to the module, i.e., to explain objectives, type of activities, role of the seminar, etc.

3. Reading time: The major purpose of a reading assignment is to give students some carefully selected materials which forcefully point out the impact of social and cultural factors on the behavior of children in school. The reading selection

should, at this point, be such that it is intrinsically interesting for students, and is not difficult for them to read and understand. There are many books which would meet these criteria, and the books used should be changed periodically. At the time of this writing it would seem appropriate to use a book such as Kozol's Death at an Early Age. This title will be used here, but should be considered as illustrative rather than an actual specification.

4. Seminar meeting: A major activity during this seminar would be a discussion of Death at an Early Age and related matters suggested in the course of the discussion. Attention should be focused on the importance of social and cultural factors and how these factors impinge upon the instructional process. Students will be encouraged to draw tentative generalizations from the reading and discussion. It is important that the seminar be conducted so that every student responds in some way to the reading.

5. Viewing of video tapes: These are to be tapes of classrooms in culturally diverse settings. Students will be asked to view these tapes: (a) as a test of their tentative generalizations drawn from the reading, discussion, and their own experience, and (b) as "information" with which to generate new or modified tentative generalizations concerning the social and cultural determinants of behavior. Tapes rather than live observations are specified because the content can be controlled, i.e., the tapes can be such that the factors to be observed will be readily observable. It is suggested that certain "non-cultural" factors be controlled, e.g., grade level, lesson topic, and perhaps even the general characteristics of the teacher should be the same in each of the tapes. Tapes could be made of classroom settings such as:

   1. Indian reservation.
   2. Upper-middle class suburb.
   3. Inner-city ghetto.
   4. School serving bi-lingual students, e.g., Spanish Harlem.
   5. Rural school.

   Students should be able to view these tapes more than once if they wish.

6. Seminar meeting: The major activity during this seminar meeting will be a discussion of the video tapes. During this seminar, questions of value as well as questions of fact will be treated in the discussion. Some attention will be given to the skills of separating normative from descriptive questions. The value or normative questions will, however, be viewed as appropriate questions for serious attention in this and all of the other seminars in this component.

7. Application assignment: The purposes of this assignment are: (a) to give students an opportunity to apply what they have been discussing, and (b) to reinforce the notion that social and cultural factors must be taken into account in an adequate explanation of behavior, and hence in properly informed teacher decisions. To illustrate the kinds of application which might be asked for, the following examples are offered:

   a. Analysis of a written case study which calls for a decision and a defense of that decision. The case study should be such that there is sufficient information about relevant social and cultural factors. Students will be asked to analyze the case and indicate what decision should be made and why such a decision is appropriate.

   b. Live observations of social situations in culturally diverse settings. This will require that students learn some sort of observational system, or at least that they have in mind certain kinds of behavior to look for. This observation needn't be in schools, and perhaps it shouldn't be. It could be an observation of behavior in a service station or bar, coffee shop, bus station, playground, etc. Following the observations, students will be asked to pay special attention to the importance of social and cultural factors. Such an exercise should be a good way to provide students with practice in applying the concepts they are studying.

8. Seminar: The major activity in this seminar meeting would be discussion of the "application" assignment as a means of providing feedback to students and to the instructor. The discussion could be extended to application of the concepts to other experiences students have had, e.g., tutoring experiences.

   At some appropriate point in this seminar meeting students will be asked to look at themselves as "reactors" to their own cultural background. (They should have little trouble with this by this time if the sensitivity training component is proceeding apace. For students who do seem to have difficulty doing this, perhaps some extra reading would be of use. Such reading would include such things as Jacob's Study of College Students' Values and Spindler's notion of "Cultural Therapy".) Up to this point, students have been focusing largely on the behavior of others, particularly children. They should now be encouraged to turn to their own behavior and to treat that behavior as partially accounted for by reference to social and cultural factors. This will be the major concern in the next reading assignment.

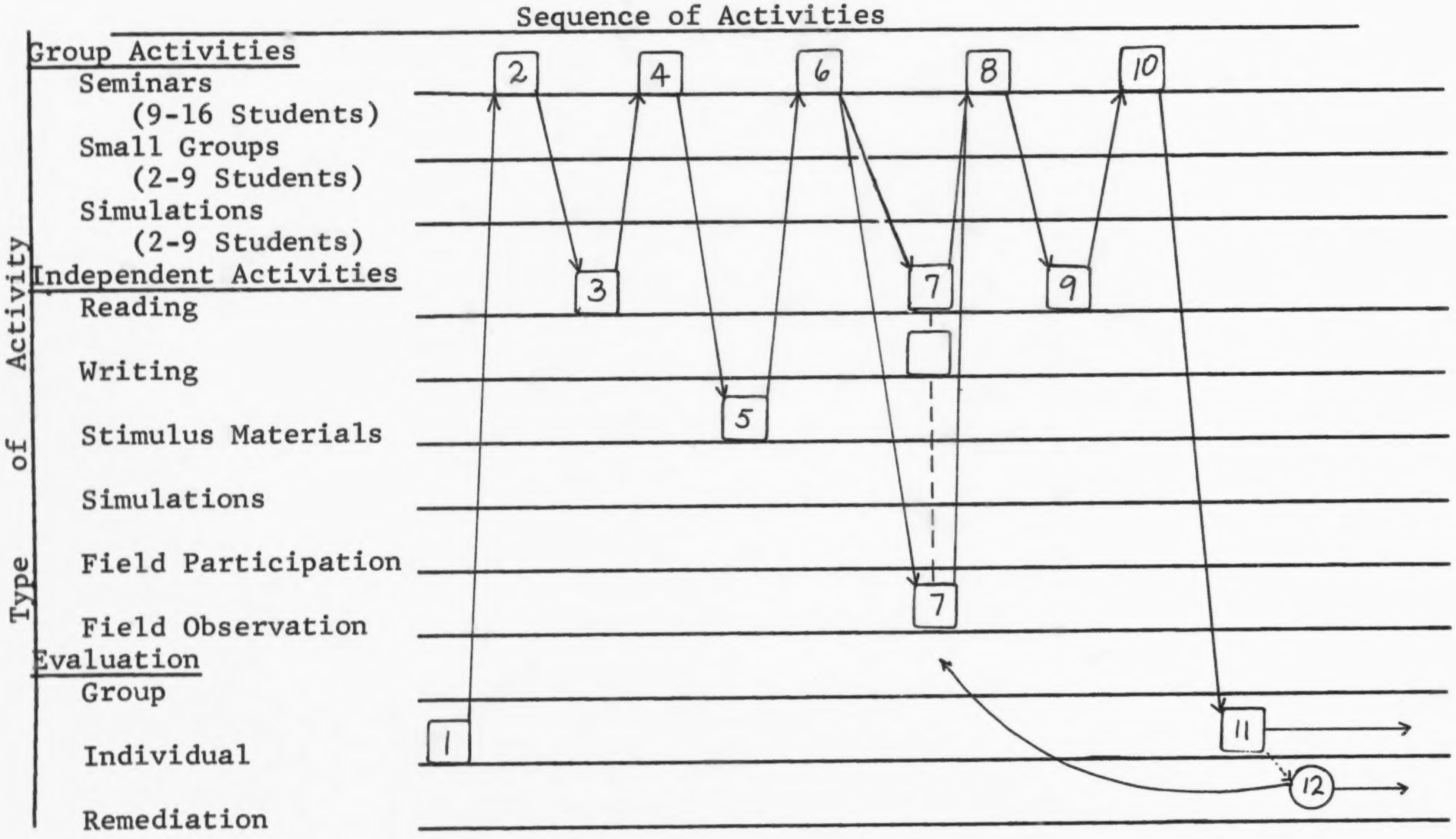
9. Reading assignment: There are many books which would serve to focus attention profitably at this point. Two of these books, for purposes of illustration, will be mentioned here. A book which would serve to focus attention on the importance of cultural background on teacher behavior is Braithwaite's To Sir, With Love. A book which would emphasize the importance of cultural and social background on the behavior of pupils comparable to the students in this model program would be The Hundred Dollar Misunderstanding. No matter what books are selected, they should meet certain criteria. In addition to making the points intended, the books should be as contemporary as possible so as to be perceived as, in some sense, "real" by the students. Students should be asked to keep their tentative generalizations in mind and to see the reading as a kind of test and as another chance to apply concepts in a contextual setting. They should also be asked to consider whether the reading supports their generalizations, and whether new or modified generalizations result from the reading.

10. Seminar: In this seminar meeting students will discuss the reading, and will be encouraged to try to integrate all of the material in the module. They will also be asked to look again at the tentative generalizations they have developed and at the evidence which supports those generalizations.

11. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

12. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-1
Figure 8.1


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
1
2
3
4
5
6
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7
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12

SCF-2: The Impact of Organizational Factors on the Behavior of Personnel in Schools

I. Prerequisites: SCF-1.

II. Placement of Module: Pre-professional year.

III. Estimated Time: Student time--30 hours.
University faculty time--10 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general objective of this module is to help students to become more aware of the impact of organizational norms and structures on the behavior of organizational members. The general objectives of this module should prepare the student to do the following:

A. Given a description of an organizational setting and of members' behavior within that setting, students would be able to:

1. Identify instances of goal displacement.
2. Cite evidence to show how the informal organization differs from the formal organization.

B. When asked to do so, students would be able to give examples of common cases of goal displacement in the schools.

C. When asked what information is needed to explain behavior in a school setting, the student would include in his answer factors which could be described as "organizational" or "structural".

V. Modular Flow Chart: See Figure 8.2.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. Seminar: This seminar should be used to orient the students to the module. This orientation would include explaining the objectives and describing the activities of the module. Some attention should also be directed to showing students that although the topic of concern differs from that of the first module, the two are interrelated. Students' discussion

in this seminar might be directed by asking them to react to the books read in the first module from the perspective of one who is looking at the organizational determinants of behavior. Toward the end of this seminar students should be encouraged to frame some tentative generalizations about the organizational determinants of behavior.

3. Video lecture: "Impact of School Organizations on the Behavior of Students and Teachers". The general purpose of this lecture should be to give students a better understanding of the importance of organizational factors in accounting for behavior in schools. It will also include attention to alternative organizational patterns, and point out to students ways in which the organization of this university, and the organization of this program, affect the behavior of students and faculty. The lecture would be made available for reviewing at the student's option.

4. Seminar: The major activity in this segment should be a discussion of the lecture. Students should be encouraged to test their own tentative generalizations on the basis of the discussion, the lecture, and their own experiences in schools. This setting should also provide the opportunity to apply the concepts dealt with in the lecture in explaining and interpreting their own experiences in schools.

5. Video lecture: "Bureaucratization of the Schools". In this lecture, bureaucratization will be described as the process whereby an organization becomes: (a) larger, (b) more centralized, (c) more specialized, (d) more standardized, and (e) more marked by hierarchal authority patterns. These five factors will be examined with reference to schools in the U.S. The lecture will then move to the question of the effect of a bureaucratic setting on personality and to the problems of goal displacement. The major purpose of such a lecture is to give students some conceptual apparatus which will help them better understand, observe, and explain behavior in a bureaucratic setting. It should also aid students in avoiding some of the problems which a bureaucracy often presents in a teaching situation.

6. Seminar: The major activity in this segment should be a discussion of the lecture. Students will again be asked to "test" their tentative generalizations, and to apply the concepts discussed in the lecture to novel situations.

7. Reading assignment: This assignment, as in the first module, should be such that students recognize in the reading the problems which they have been discussing. One book which would do this, and which will be used here as an illustration, is Bel Kaufman's Up the Down Staircase. Whatever book is

assigned, the students will be asked to look at the work in the light of concepts they have been discussing and as an opportunity to test those concepts and generalizations.

8. Seminar: Purposes of this seminar meeting would be to discuss the reading and student reactions to the reading, identify some students who need extra help, and some who may be allowed to move to the evaluation segment. The majority of students will be given an "application-practice" assignment which would be explained to them at this time.

9. Application: Several different assignments could serve this purpose. Among them would be:

    a. A paper, based on the book read, addressed to the question of the extent to which the organizational setting affects the educational process. This paper should include such things as illustrations of goal displacement and the distinction between formal and informal organization.

    b. A paper based on the student's experiences in educational institutions and how this career in schools has been affected by organizational settings.

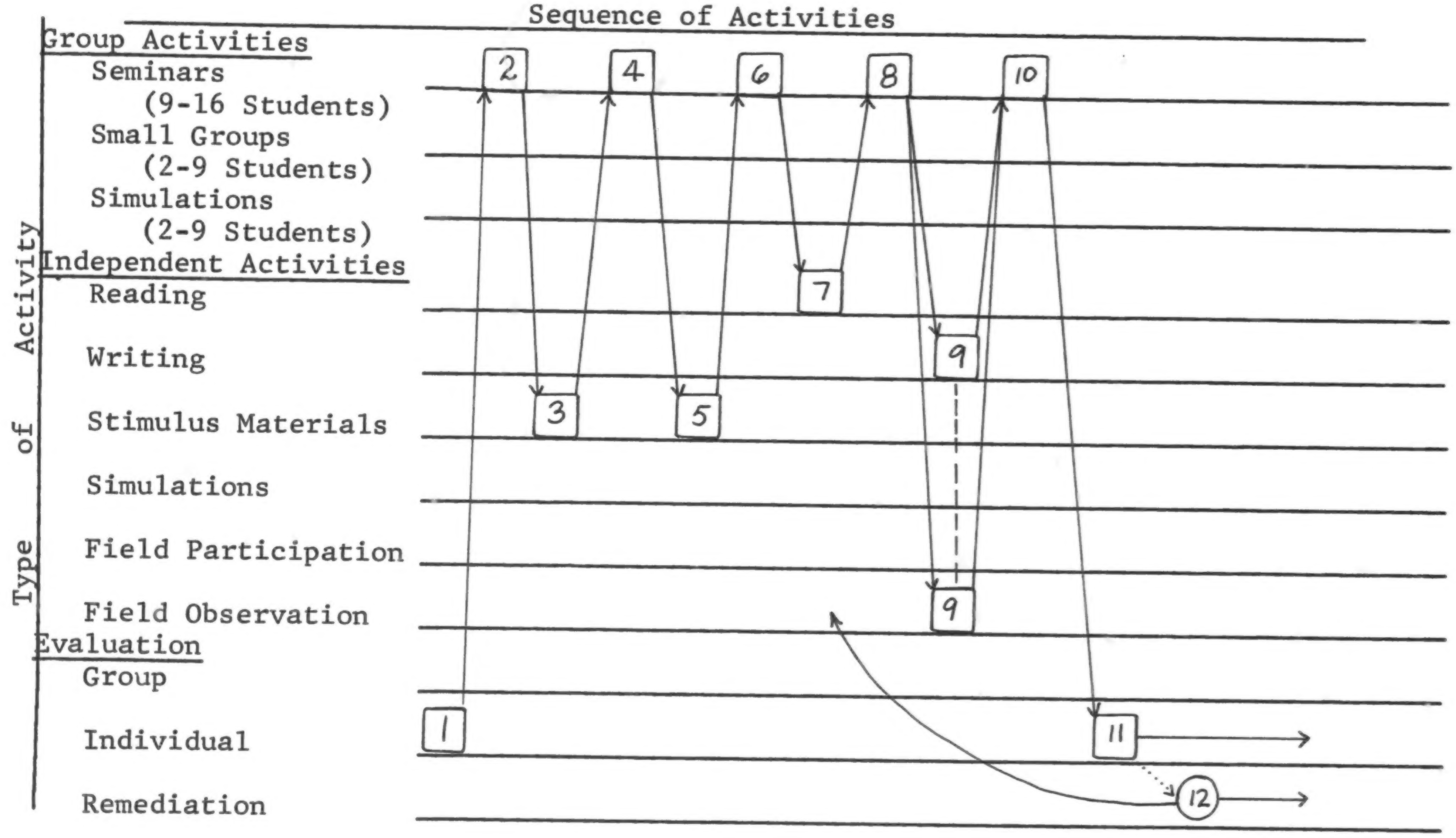
    c. Actual observations and report of those observations of some organization and of behavior within that organization. Among the factors which students might be asked to look for: (a) difference between the formal and the informal organization, and (b) instances of goal displacement.

10. Seminars and meetings with individual students to discuss application assignments.

11. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

12. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-2
Figure 8.2


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-3: The School as a Social Institution

I. Prerequisites: SCF-2.

II. Placement of Module: Pre-professional year.

III. Estimated Time: Student time--30 hours.
University faculty time--10 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general objectives of this module are: (a) to help students view the school as a social institution which stands in a reciprocal relationship with other institutions in the society; (b) to help students recognize and be able to distinguish between primary and secondary functions of schools; (c) to recognize how changes in other institutions are affecting schools, and how schooling is affecting other institutions. The general objectives of this module should prepare the student to do the following:

A. When asked to do so, the student would be able to list and distinguish between primary or manifest functions and secondary or latent functions of educational organizations which have been dysfunctional.

B. Given a list of major social changes (e.g., geographic mobility, urbanization, changes in economy, etc.) students would be able to show how certain patterns of schooling, (e.g., local control, or traditional curricula, or school leaving patterns) must be modified because of social changes if the school is to be functional in the society.

C. Given a description of a curriculum and asked to construct criteria and to evaluate that curriculum, students would include in their evaluation criteria: (a) the nature of the society, and (b) the functions he regards as important for schools.

V. Modular Activity Flow Chart: See Figure 8.3.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. Seminar: Objectives of the module should be explained, and a description of the activities in the module should be given.

The major thesis is that the school stands in a reciprocal relationship with other social institutions, and hence to understand what is happening in schools, one must pay attention to the forces in the wider society which are affecting schools. Because the relationship is reciprocal, one must also ask how the functioning of the school is affecting other institutions.

3. Reading: The point to be made by the reading assignment will be, in simple terms, that a school is intended to serve a particular social order, and that when that order changes there will be pressure on schools to change accordingly. If schools do not so change, they will become dysfunctional in the society. A secondary point is that although schools do change to reflect the nature of society, there is often a time lag between the social change and the change in patterns of schooling. There are several books which could be used to make these points. The one which will be used here as an illustration is Benjamin's The Saber-Tooth Curriculum. Students will be asked to look for "principles" or generalizations about school-society relations as they read.

4. Seminar: The major activity in this seminar will be a discussion of the reading, and student reactions to that reading. Students will be asked to look at their own education in terms of its functionality, e.g., students might be asked to explain to what extent, and why, they might regard some of their own education as comparable to the Saber-Tooth Curriculum. Such discussion should lead students to some tentative generalizations about criteria with which to evaluate a curriculum or parts of a curriculum.

5. Video lecture: "The Nature of Society and Social Values as Determinants of the Functions of the School." The major purpose of this lecture would be to show that as social values and/or the society itself undergo changes, there are pressures for the school to change accordingly, and that when schools do not change they may become irrelevant at best and dysfunctional at worst. (In this lecture it may also be desirable to raise the normative question of whether schools ought to be functional in a society which is less than perfect.) Both historical and contemporary examples will be given. Questions will be raised toward the end of the lectures by pointing out some sweeping social changes now occurring, and asking what these changes will mean for schools.

6. Seminar: Major activity at this seminar meeting should be to discuss the lecture and the questions raised by the lecture. Students will be asked to examine the questions raised by the lecture, and to examine the questions of: (a) whether their own education has equipped them for a changing society, (b) if the education they have had would be appropri-

ate for those whom they will teach. Toward the end of this meeting students will again be asked to examine tentative generalizations for evaluating an element of a curriculum. They will be asked to keep these generalizations in mind as they view the next video lecture, and to come to the next seminar prepared to discuss how they might wish to modify these generalizations.

7. Video lecture: "Changing Functions of the Contemporary American School." There are a number of points which will be included in this lecture. Among them are:

    a. Educational and occupational structure--emphasis will be on the fact that the changing occupational structure calls for changes in the way a school performs its "allocation" function. It would also be pointed out that allocation decisions on the part of teachers begin to occur very early in the elementary school. Also emphasized would be the increasing need to base allocation decisions on achievement rather than ascription. This might be the place, also, to examine problems such as the emphasis on "credentialism", the relationship between occupational structure and the so-called drop-out problem, etc.

    b. Schools and social reform--some of the questions which will be examined here are: (a) To what extent can schools serve as agents of reform? (b) To what extent should they? and (c) To what extent do they now?

    c. Primary and secondary functions of the school--purpose here would be to show that some functions which we would probably consider secondary (e.g., baby-sitting, entertainment of the community, courtship, etc.) sometimes get in the way of what we consider to be the primary functions of the school (e.g., allocation to further schooling, allocation to adult roles, transmission of culture). The concept of manifest and latent functions will also be discussed.

8. Seminar: Major activities in this meeting would be: (a) discussion of the lecture, and (b) discussion of students' generalizations about criteria with which to evaluate curricula and extra-curricular activities.

9. Reading: The reading assignment should be such that it raises questions about what contemporary schools are doing, and what they ought to be doing. Many contemporary writers have dealt with this problem. For illustrative purposes we will use Paul Goodman's Compulsory Miseducation.

10. Seminar: The seminar discussion will be focused on the reading assignment. Students will be asked to respond to questions such as:

    a. What basic questions does Goodman raise? What are his answers? Do you agree? Why or why not?

    b. Does Goodman adequately account for the nature of modern society? What does he see as the primary function(s) of the school? Secondary? Do you agree? Explain.

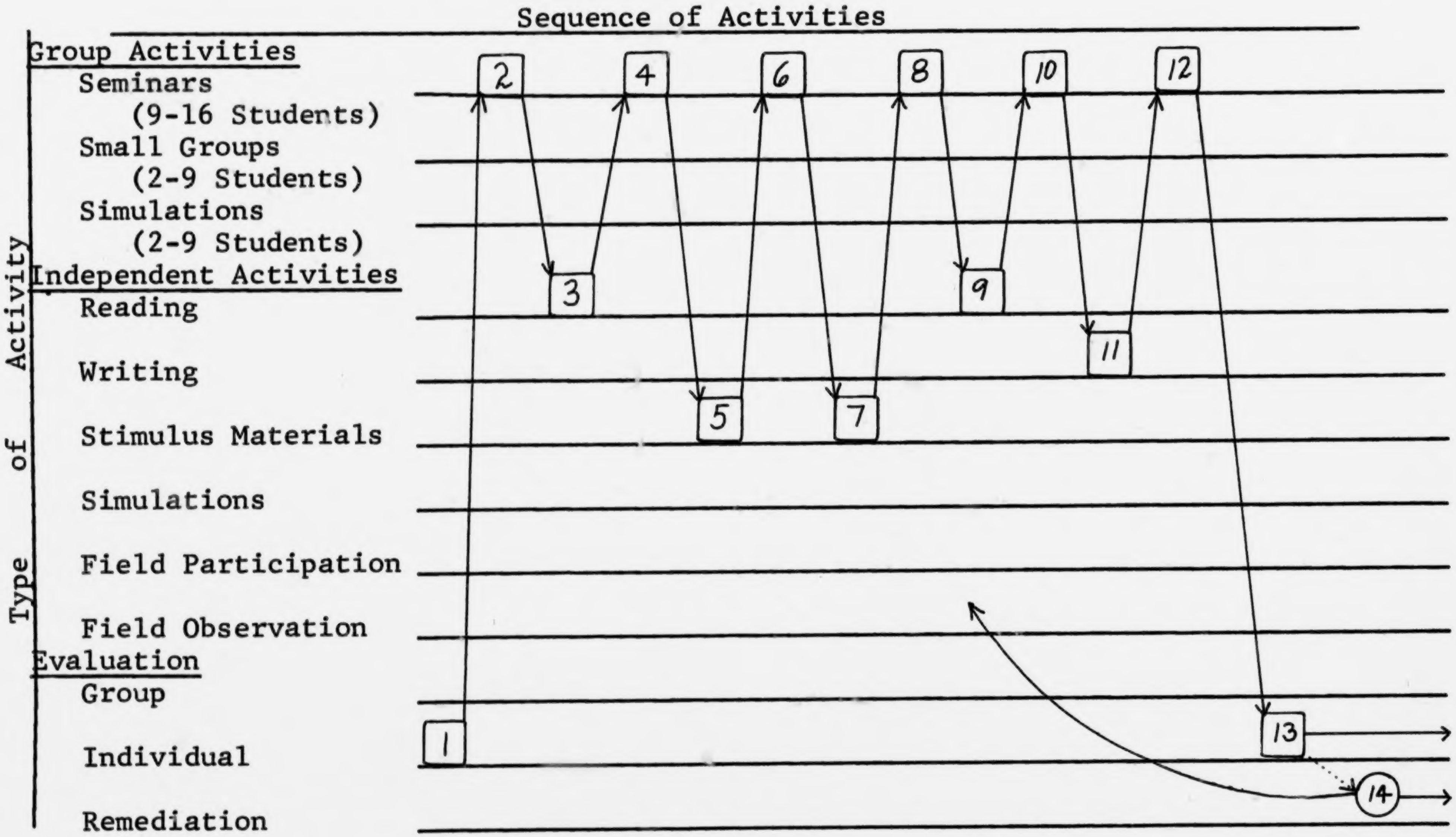
11. Application paper: The paper will be intended as an exercise which will help students integrate and apply the material discussed in this and in the preceding two modules. One possible assignment would be to ask the students to write a paper on their own education. They might be asked to evaluate that education, raising the question of the extent to which it has been the compulsory miseducation in the Saber-Tooth Curriculum.

12. Seminar: The major activity of this meeting should be a discussion of the application papers. Then students will be asked to summarize and draw generalizations about the material in this module.

13. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

14. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-3
Figure 8.3


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-4: Analyzing Statements in Education Discourse

I. Prerequisites: SCF-3.

II. Placement of Module: Senior professional year.

III. Estimated Time: Student time--15 hours.
University faculty time--6 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general objectives of this module are: (a) to develop skill in recognizing various sorts of statements as they occur in everyday discourse, and (b) to learn how to evaluate appropriately each kind of statement. The general objectives of this module should prepare the student to do the following:

A. Given a list of statements, students should be able to identify and distinguish among:

1. Empirical statements.
2. Analytic statements.
3. Value statements.
4. Preference statements.
5. Metaphysical statements.

B. Given any particular kind of statement, students should be able to describe the procedure an appropriate evaluation should take and the kind of evidence which would be necessary to support that statement.

C. Given an argument in which claims are made and "cases" given for those claims, students should be able to identify the claims and evaluate the case according to the following criteria:

1. Appropriateness of the evidence to the claim.
2. If appropriate, is the evidence strong enough to warrant accepting the claim?

V. Modular Activity Flow Chart: See Figure 8.4.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

a. Have additional instruction prior to taking this module.
b. Study all or selected portions of this module.
c. Proceed to the post-test or following module.

2. First seminar of the module: This seminar will be used to orient students to the module. Objectives will be explained and activities described.

3. Video lecture: Students will be asked to view a video lecture on "Identifying and Evaluating Various Kinds of Claims in Educational Discussions". The lecture will cover different kinds of claims or statements--empirical, analytic, value, preference, metaphysical--and how these claims are properly evaluated. Examples will be used to show how a failure to recognize and properly evaluate these statements leads arguments, and hence, policy astray.

4. Seminar: Discussion of the lecture. Students will be asked to give examples of the different kinds of statements; to describe the kind of evidence which would be needed to evaluate the claims, etc. Major purpose of such a seminar meeting will be to clarify questions students have about the lecture. Students will be given examples of statements to identify and evaluate so that they may see if they understand the material dealt with in the lecture.

5. Reading: Purposes of the reading would be to: (a) expand on the materials treated in the lecture and seminar meeting, and (b) to reinforce and further explain the concepts which have been introduced. There are not many brief, readable, and satisfactory treatments of this topic. One of the best at the time of this writing is John Wilson's, Language and the Pursuit of Truth. Another fairly complete treatment is found in L.B. Brown's, General Philosophy in Education. Since this is but an illustration, only the Wilson book will be mentioned in the description of the remaining steps of this module.

6. Seminar meeting: A major activity would be a discussion of the Wilson book. Students would be asked to apply the concepts discussed by Wilson in analyzing educational arguments.

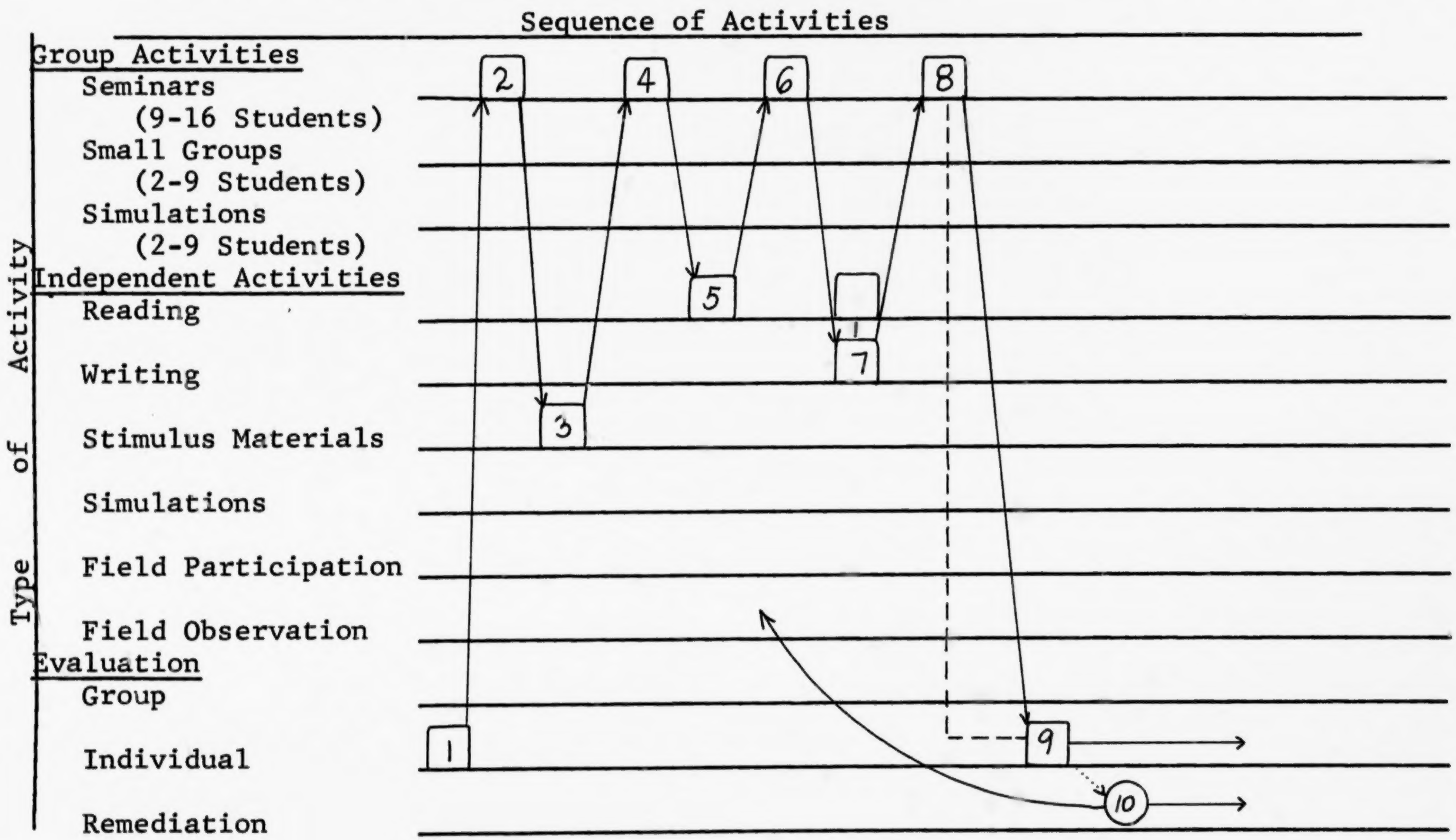
7. Application assignment: Numerous assignments could and should be developed which would require that students practice applying the concepts and skills. As one illustration, students could be given a number of articles, essays, editorials, segments of a script for a class, etc. They could then be asked to analyze these materials by: (a) identifying the kinds of claims made, (b) citing the evidence given in the materials which would support the claims made, (c) citing instances in which the claim is not adequately supported by the evidence given, and (d) indicating instances where the wrong kind of evidence is offered.

8. Seminar meeting: A major activity would be a discussion of the application assignment (feedback to both students and instructor) and of the problems encountered in using the concepts and skills which have been treated.

9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-4
Figure 8.4


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-5: Analyzing Arguments in Educational Discourse

I. Prerequisites: SCF-4.

II. Placement of Module: Senior, professional year.

III. Estimated Time: Student time--15 hours.
University faculty time--6 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general objective of this module is to improve students' skills in analyzing and making reasoned judgments about arguments as they appear in everyday educational discourse. The general objectives of this module should prepare the student to do the following:

A. Given a set of "informal" arguments about education, some of them valid and some invalid, students should be able to indicate which of the arguments are valid and which are invalid.

B. Given a set of informal, but invalid arguments, students should be able to indicate *why* each of the invalid arguments is invalid. (Although the names generally given to common fallacies, such as the fallacy of false cause or the *ad hominem* argument, will be useful in such an exercise, the proper labelling of the fallacy will not be considered sufficient. The student would also be required to show why the fallacy is a fallacy.)

C. Given a set of premises, the student should be able to construct valid arguments using these premises. (To put this in a slightly different way, given a set of premises and asked to construct arguments to show what can be concluded from the premises, students will construct arguments which are valid.)

V. Modular Activity Flow Chart: See Figure 8.5.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:
   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. First seminar of the module: Seminar would be used to orient students to the module. This orientation would include an explanation of the objectives and of the activities of the

module. It would also include an explanation of how the material in the preceding module is related to this one.

3. Video lecture: "An Overview of Some Problems in Evaluating Educational Arguments." This lecture would cover: (a) distinctions between validity and truth in reference to argument, (b) explanations and examples of fallacies of ambiguity and fallacies of relevance, and (c) problems in drawing and evaluating inductive generalizations.

4. Seminar meeting: Major activity would be a discussion, clarification, and expansion of the lecture. Student questions about the materials would be encouraged. Opportunity would be given for group practice in applying the concepts. "Case" arguments may be analyzed by the group.

5. Reading: Purpose will be to reinforce and further explain the concepts thus far introduced. One reading which would be appropriate here would be Chapter 2 in L.M. Brown's General Philosophy in Education. Other treatments would probably serve as well, but the Brown book will be used here as an illustration of the kind of material needed.

6. Seminar meeting: Major activity would be a discussion of the reading. Attempts would be made to integrate the materials from the lecture, the reading, and the earlier discussion. Students would then be given practice in analyzing "case" arguments using the skills and concepts which have been introduced.

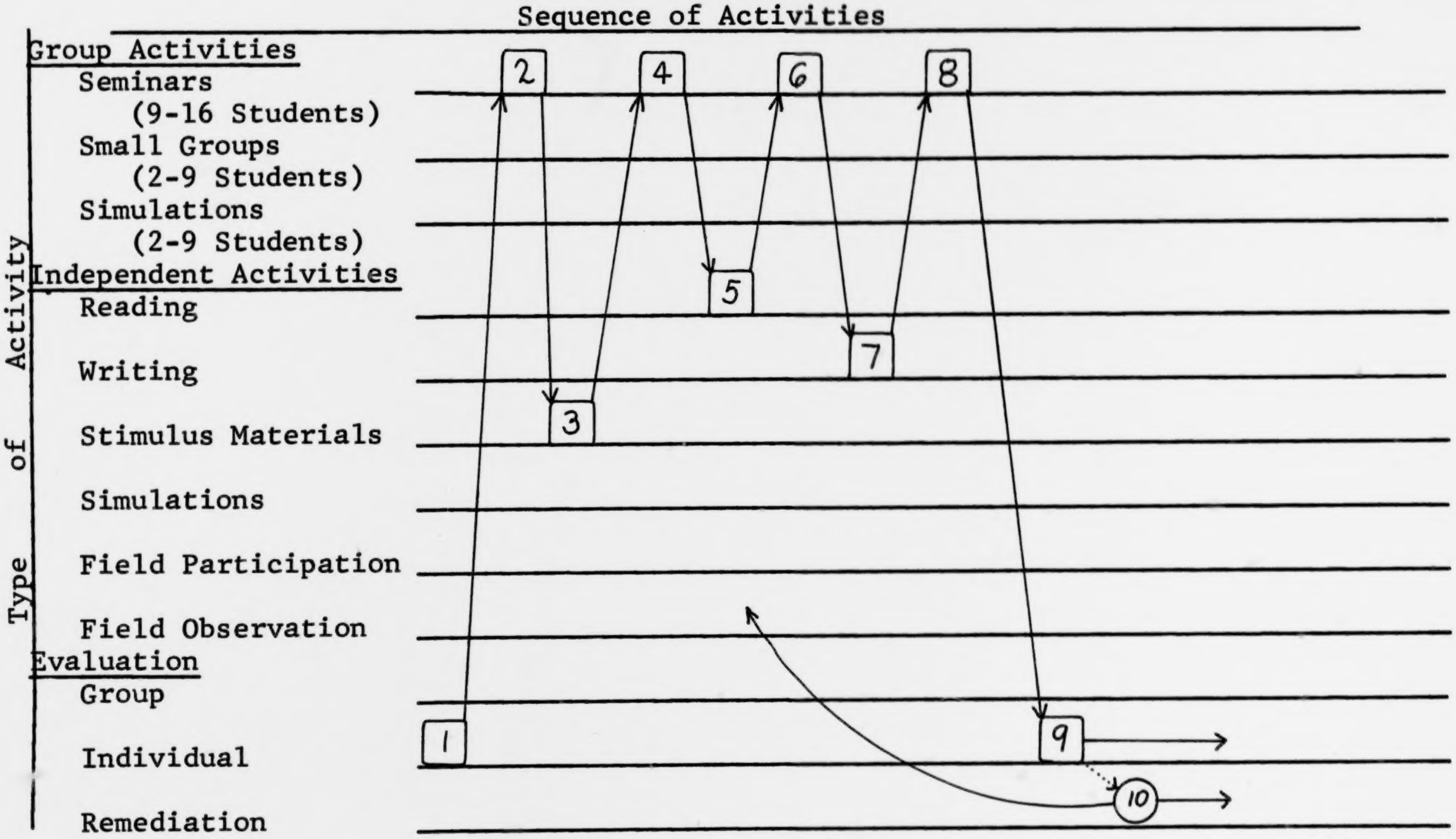
7. Application practice: This assignment could take a variety of forms. One approach would be to give students selected written educational materials and ask them to analyze those materials using the skills and concepts which were discussed in the seminar meeting. The analysis should include identifying cases of valid arguments, cases of invalid arguments, showing why the invalid arguments are invalid, etc. Students might also be given sets of premises and be asked to construct valid arguments using these premises. On the basis of their performances, some students might proceed directly to Module 6.

8. Seminar meeting: Major activities would be designed to provide students with feedback on the basis of their application practice assignment. This would also provide the instructor with feedback. Some students may at this point demonstrate sufficient skill to move on to Module 6. Other students will go to step (9) which will be a carefully structured evaluation situation.

9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-5
Figure 8.5


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-6: Role of Definitions, Slogans, and Metaphors on Educational Discourse

I. Prerequisites: SCF-5.

II. Placement of Module: Senior, professional year.

III. Estimated Time: Student time - 15 hours.
University faculty time - 5 hours.
Clinical Professor and Clinical Teacher time- 0 hours.

IV. Operational Objectives: General objectives of this module would be: (a)to help students develop skills in recognizing the appropriate roles played by definitions, slogans, and metaphors in educational discourse, and (b) to help develop skills in evaluating particular definitions, slogans, and metaphors as they occur in the language of education. The general objectives of this module should prepare the student to do the following:

A. Given appropriate written materials (script of a lesson, article from a journal, editorial, etc.) students should be able to correctly identify instances of the three types of definitions described by Scheffler in his Language of Education, (i.e., stipulative, descriptive, and programmatic).

B. Given an argument which has gone astray due to misuse of a slogan, (e.g., a slogan which is used as if it were a literal claim), students should be able to show how to evaluate that slogan, and why the use of the slogan is improper.

C. Given a written statement in which the force of an argument rests on a metaphorical statement, students should be able to: (a) identify the metaphor, (b) indicate the point at which the metaphor breaks down, and (c) indicate alternative metaphors.

V. Modular Activity Flow Chart: See Figure 8.6.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. First seminar meeting of the module: This seminar will be used to orient students to the module. This orientation will

explain the objectives, describe the activities, and show how the concepts and skills of the preceding module are relevant to this module.

3. Video lecture: "Definitions, Slogans, and Metaphors: Some Problems and Power for the Teacher." This lecture will be an overview of the concepts and problems with which this module deals. Examples will be used to show that a lack of critical awareness of how definitions, slogans, and metaphors function and how they are properly evaluated, leads discussions, arguments, and policy proposals astray.

4. Reading: Materials will be assigned on the topic of definitions. Major reading will be such things as the chapter on definitions in Scheffler's The Language of Education. Many other sources would be useful as supplements, e.g.; L. Brown's General Philosophy in Education, pp. 15-21; J. Saltis' Conceptual Analysis and Education.

5. Seminar meeting: Major purpose of this session will be discussion and application of the skills and concepts introduced in the lecture and in the reading. Students will be given examples of definitions, and will be asked to indicate what kind of definition each example represents, and how one would go about the evaluation process.

6. Practice application: Numerous assignments are possible which would provide students with practice in identifying and evaluating the various kinds of definitions. The following examples are intended as illustrations:

    a. Assignment #1:

        1. Write a paragraph in which you properly use each of the definitions discussed.
        2. Write a paragraph(s) in which you use each of the definitions discussed in a misleading manner.
        3. Using the evaluation criteria discussed, evaluate each of the definitions you have used.

    b. Assignment #2:

        Students should be given the script of a classroom lesson. This script would contain the several definitions used, and some would be used properly and some not. They would be asked to identify the definitions by type and to evaluate each definition according to the criteria discussed.

7. Seminar meeting: Major purposes of this meeting will be to provide feedback to students and instructor, to have students raise questions about the application of these concepts, and

to provide additional examples so that students will have the opportunity to sharpen their skill in analyzing definitional statements.

8. Reading assignment: On the topic of slogans in educational discourse, there are a very limited number of appropriate readings. Two which would serve here are: (a) the chapter on slogans in Scheffler's, The Language of Education, (b) Komisar and McClellan's, Slogans in Education, and (c) Smith and Ennis' (Eds.), Language and Concepts in Education.

9. Seminar meeting: In this session the reading assignment will be discussed, and students will be given an opportunity to begin practicing applying the concepts and skills discussed in the reading, e.g., students will be given examples of slogans which occur within arguments and/or policy proposals, and will then be asked to evaluate these slogans using the criteria suggested in the reading.

10. Application practice: This assignment will be designed for students to demonstrate skill in recognizing and evaluating slogans in educational writings.

11. Seminar meetings: Major purpose of this meeting will be to provide students with feedback on the basis of the application-practice assignment. Students will then be provided with an opportunity to raise further questions and to practice further in identifying and evaluating slogans.

12. Reading: This will be an assignment dealing with metaphors in educational discussions. Appropriate materials on this topic are not extensive. Perhaps the most appropriate ones at the time of this writing would be: (a) the chapter on metaphors in Scheffler's, The Language of Education, (b) Max Black's article in Scheffler (ed.), Philosophy and Education, and (c) the final chapters of Brauner and Burns' Problems in Education and Philosophy.

13. Seminar meeting: Major activities in the meeting would be: (a) discussion of the reading, (it may be that this reading could be replaced with a lecture which would integrate the reading materials), (b) examination of some additional metaphors which are commonly found in educational literature, and (c) practice in evaluating metaphorical statements.

14. Application-practice: Students will be given an application assignment which would require the application of the concepts and skills discussed in analysis and evaluation of metaphorical statements in an actual educational argument or policy debate.

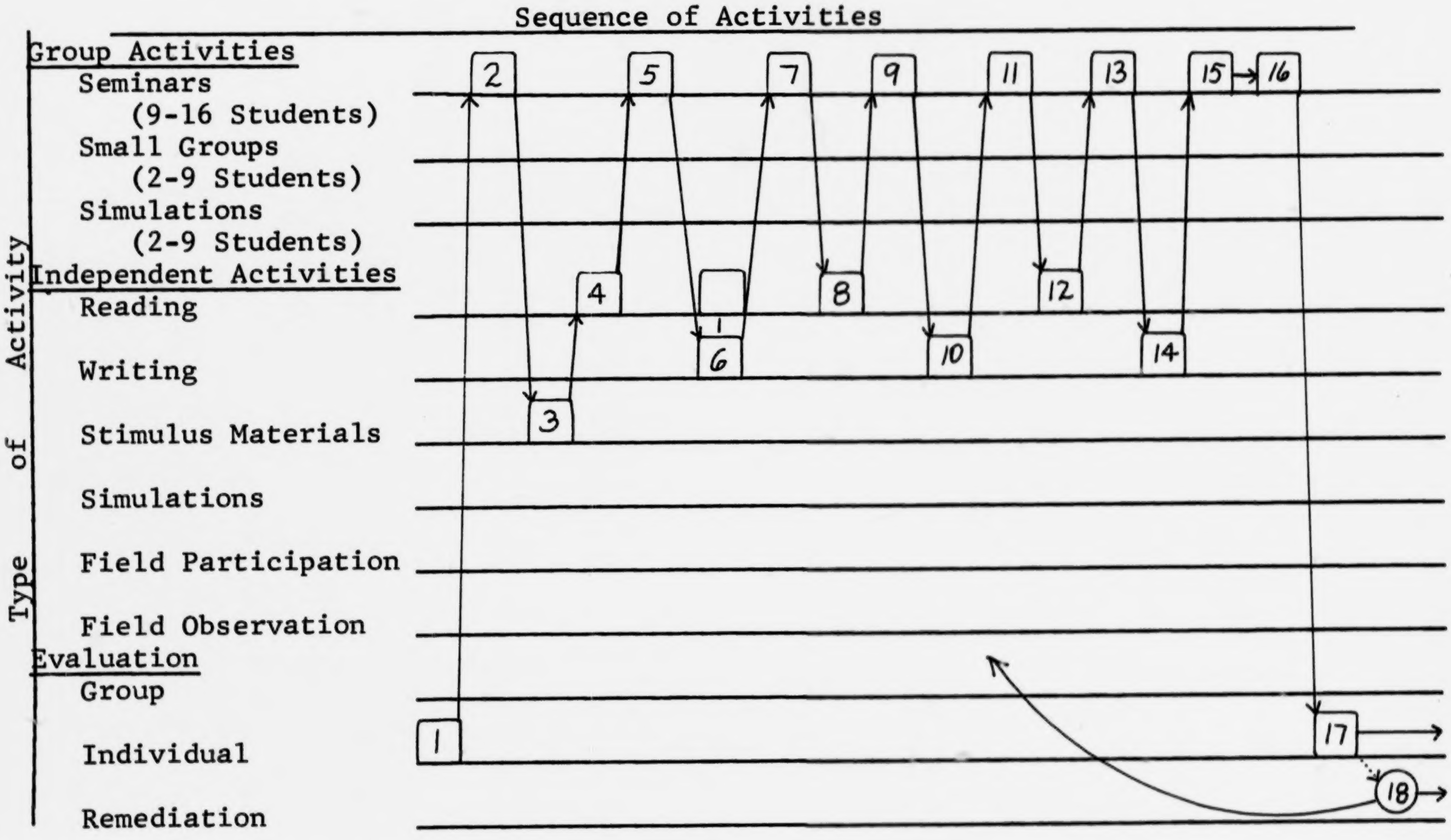
15. Seminar meeting: This session will provide students with feedback concerning their performance. Students will also be given an opportunity to raise further questions about the concepts and skills, and will be given further practice materials.

16. Final seminar meeting: Purpose here will be to integrate the materials covered in this module and to provide examples of how all the skills discussed could be broughttogether to provide a more adequate analysis of educational dialogue.

17. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

18. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-6
Figure 8.6


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
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SCF-7: Situations--Teacher, Student and the Class

I. Prerequisites: SCF-6.

II. Placement of Module: Senior, professional year.

III. Estimated Time: Student time-36 hours.
University faculty time-12 hours.
Clinical Professor and Clinical Teacher time-0 hours.

IV. Operational Objectives: The general objectives of this module are: (a) to enhance student understanding of the social, cultural, and organizational determinants of the behavior of children in a school setting; (b) to help students develop techniques and skills with which to analyze classroom groups in order to better understand and predict behavior of class members; (c) to better understand the effect of a sub-culture background on the behavior of children in American schools; (d) to help students develop more adequate conceptual apparatus with which to view pupils, classes, and schools. The general objectives of this module should prepare the student to do the following:

A. List a series of words used in their teaching and analyze these words in terms of multiple meanings that are a function of the unique backgrounds pupils bring to class.

B. Construct unfinished stories involving value choices. Give these stories to middle and lower class children to complete, and analyze their responses in terms of class, church affiliation, etc.

V. Modular Activity Flow Chart: See Figure 8.7.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. Seminar meeting: This will be the orientation meeting. The major purposes will be to: (a) explain the objectives of the module, (b) explain the role of the seminar, and (c) describe other activities which will be included.

3. Reading: The students will be given carefully selected readings focusing on various conceptions of the relationships occuring between teachers, individual pupils, and the class.

There is, of course, an enormous body of literature dealing in one fashion or another with these relationships. The assumption which gives focus to this treatment is that psychology is woefully inadequate in explaining the phenomenon of questions. The problem is one of explaining and predicting human behavior. The factors which must be included in an adequate explanation go far beyond those with which psychologists generally deal. Some of the relevant factors and the conceptual structures with which to interpret those factors can be borrowed from disciplines such as sociology and anthropology. For example, we may accept Marton's notion (*Social Theory and Social Structure*), that given any set of goals and any set of means to their achievement, the following schematized responses are available:

Goals	*Means*
+ (accepting)	+ (accepting)
+ (accepting)	- (rejecting)
- (rejecting)	+ (accepting)
- (rejecting)	- (rejecting)

The major problem is understanding the variables that lead individual pupils and groups of pupils to choose one or another of these options in a variety of situations. The pedagogical merit of this approach resides in the fact that most young teachers are not frightened, in the main, at the level of a one-to-one relationship. Rather, they are firghtened by the task of dealing with individual children in an operative social group. As such, their psychological concepts are of limited utility in dealing with these situations.

It would appear that some things like Milford J. Spiro's, *Culture and Personality--The Natural History of a False Dichotomy*, and Lawrence Haworth's, *The Good City* (chapter 2, "Institution and Structure") would be appropriate introduction to these understandings.

4. Seminar meeting: The major activity during this seminar would be a discussion of the reading and related matters which emerge in the course of the discussion. The focus would be on the more fruitful ways of conceiving the individual, and what these conceptions would have to say in the way the teacher conceives himself as an individual, and the way he conceives himself in the particular relationship in question--i.e., the teacher-student relationship. Students will be encouraged to solidify concepts as operating tools to be used in viewing and interpreting relationships. It is important that *every* student respond in some way to the reading, and develops some sort of tentative closure.

5. Analysis assignment: Many assignments could be developed to serve this purpose. One example will be offered here, and this example assumes that students are in the throes of a teaching experience. If this is not the case, a mediated experience could be developed in order to provide a commonality of reference. This is a pedagogical decision that can only be made at the operating level of this program. In any case, the example assignment is as follows: analyze your language arts work in your classroom for the past week. Write an interpretive report of that work in which you answer the following questions: How many words have multiple meanings depending upon: (1) the context, and (2) unique contexts derived from the background the children bring to class? Are the teacher and his "packages" (books, etc.) talking the same language as the class? Is communication enriched or deprived by these facts? How many words or concepts are completely beyond the experience range of some portions of the class? Would you think of grouping according to social class placement, ethnic background, etc., for language arts? Does the neighborhood already do this? What kind of evidence is available and relevant to issues of this type, and how do they reflect your conception of the individual and "individualizing" instruction? What kind of conclusions do you arrive at in terms of planning for instruction in the language arts?

6. Seminar meeting: The major activity during this seminar meeting would be a discussion and feedback on the basis of student papers. Students would be asked to defend their support or objection to such a single criterion as social class placement for instructional grouping. Some logical skills might be reviewed at this time, e.g., separating value claims, empirical claims, and analytic claims.

7. Analysis-application-practice: The following illustrations are to be regarded as suggestive of the type of things that could be done to drive home, at an operational level, the distinctions and conceptualizations developed and employed in the previous assignment and consequent seminar.

   Assignments:

   A. Construct a sociogram in reference to stated pupil preferences in regard to classmates they would most enjoy and/or least like, to work in a variety of specific situations. Interpret the sociogram along categories such as age, sex, I.Q., ethnic grouping, size, etc. Compare the informal leadership patterns with whatever formal patterns exist (such as class officers) if any.

   B. Construct a simple questionnaire to be administered only to selected lower and middle class students. Questionnaires should aim at locating family data (if otherwise not available) and eliciting attitudes toward school, adults, and work. Interpretation should be aimed at finding patterns within groups--convergent and divergent. A similar relationship should be sought between the small quest and literature on this topic.

8. Seminar meeting: The major activity during this seminar meeting would be a discussion of the results of and problems with the assignments. Each student would be expected to participate in a critique of selected assignments with an emphasis on the hypothetical nature of interpretation of data collected and the multiple dimensionality of the teacher-student-class interaction.

9. Reading: This assignment would focus on the reward system operative with the teacher-student-class relationship (both intended and unintended). The concept of reward systems ties with the idea of the classroom as a social system. Reward here is to be interpreted as both positive and negative. Again an enormous body of literature is available. Selections like Goslin's, The School in Contemporary Society (chapters 2 and 4); Hodgkinson's, Education, Interaction, and Social Change, (chapter 1 and 9); Clark's, Educating the Expert Society, (chapters 1,6, and 7); Spindler's, Education and Culture, ("The Transmission of American Culture", pp. 148-172) and Goffman's, The Presentation of Self in Everyday Life would seem appropriate at this juncture.

10. Seminar meeting: The major activity of the seminar would be a discussion of the readings and related illustrations from the readings, the students' own experience, and the instructor. The students will be encouraged to draw tentative generalizations. Among these, clearly, is a generalization such as "varying perceptions of what constitutes a reward (positive or negative) makes it virtually impossible to achieve uniform intended consequences or to avoid unintended consequences--some of which the teacher would, if aware of them, regard as extremely negative." Hopefully, such a generalization would in turn generate the question of the importance of justifying value choices of both an instrumental and final nature.

11. Analysis-application-practice assignment: Appropriate application could be based on the analysis of a tape, case study, or live school situation in terms of the concepts developed in reading and seminar.

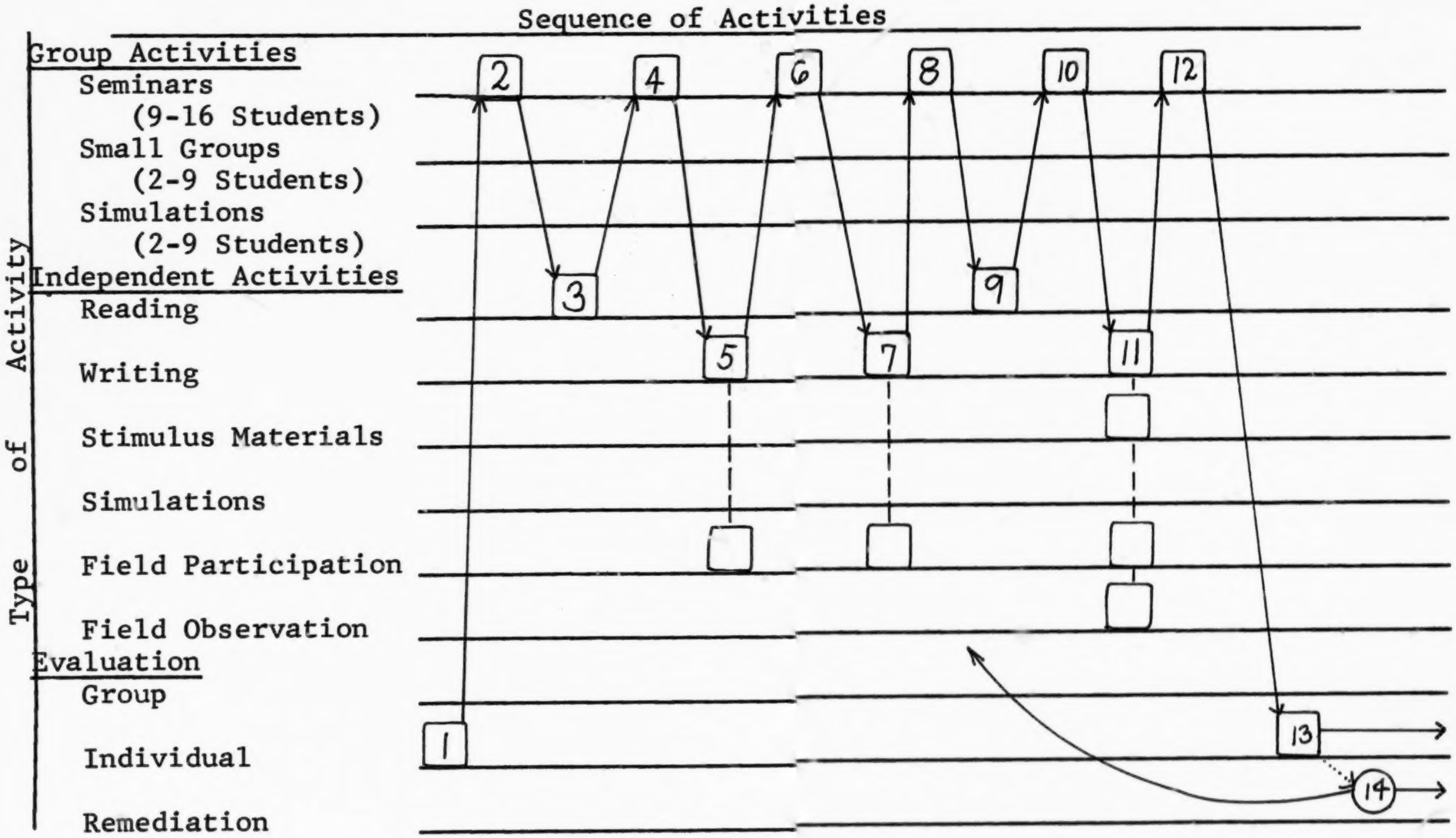
12. Seminar meeting: This session would be used to provide feedback to students on the application assignment. It would also

be used to summarize and integrate all of the material covered in the module. Students would again be asked to frame tentative generalizations which could be generated from this experience.

13. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

14. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-7
Figure 8.7


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-8: Situation--Teacher and School Personnel

I. Prerequisites: SCF-7.

II. Placement of Module: Senior, professional year.

III. Estimated Time: Student time--18 hours.
University faculty time--6 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: Major objectives of this module are to: (a) enhance students' understandings of the organizational determinants of behavior in schools, and (b) introduce students to certain conceptualizations for bureaucratic organizations and to develop selected skills which will aid them in analyzing and functioning within such an organization. The general objectives of this module should prepare the student to do the following:

A. Placed in a bureaucratic setting, students could determine the informal organization of that setting.

B. Placed in a school setting, students could identify behaviors of teachers and principals which assume the bureaucratic principle of authority and those which assume a collegiate principle.

C. Placed in a school setting, students could identify instances of goal displacement and/or substitution.

V. Modular Activity Flow Chart: See Figure 8.8.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:
   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. Seminar meeting: In this orientation meeting, objectives will be explained, activities described, and the relationship of this to earlier modules pointed out.

3. Reading: The students will be given carefully selected readings focusing on school personnel and the teachers' relations to them in the context of a school as a bureaucratic structure. This is aimed at deepening and widening their understanding of materials dealt with in the pre-professional Module Group #1. There are a number of appropriate readings

for this topic. Illustrative of these are Presthus' The Organizational Society; Clark's, Educating the Expert Society, (chapter 5); and Hodgkinson's, Education, Interaction, and Social Change (chapter 2).

4. Seminar meeting: The major activity during the seminar would be a discussion of the major conceptualizations provided in these readings in terms of their implications for the analysis of the school as a bureaucratic structure and its capacity for value displacement. Students would be given the opportunity to test their tentative generalizations and to receive feedback.

5. Reading: Appropriate selections would be Clark's, Educating the Expert Society (chapter 4) and Presthus', The Organizational Society, (chapters 6, 7, 8). The students will be asked to read the material with particular attention paid to the notion of control through institutional mechanisms. Various bases of power are of significance here. Also of significance are the various spheres of power which often overlap and conflict. Students will again frame tentative generalizations on the basis of their reading.

6. Seminar meeting: The focus of the seminar would be upon the major concepts in the readings and their implications for teacher survival within the system, and the potential for redirecting or effecting changes within the system.

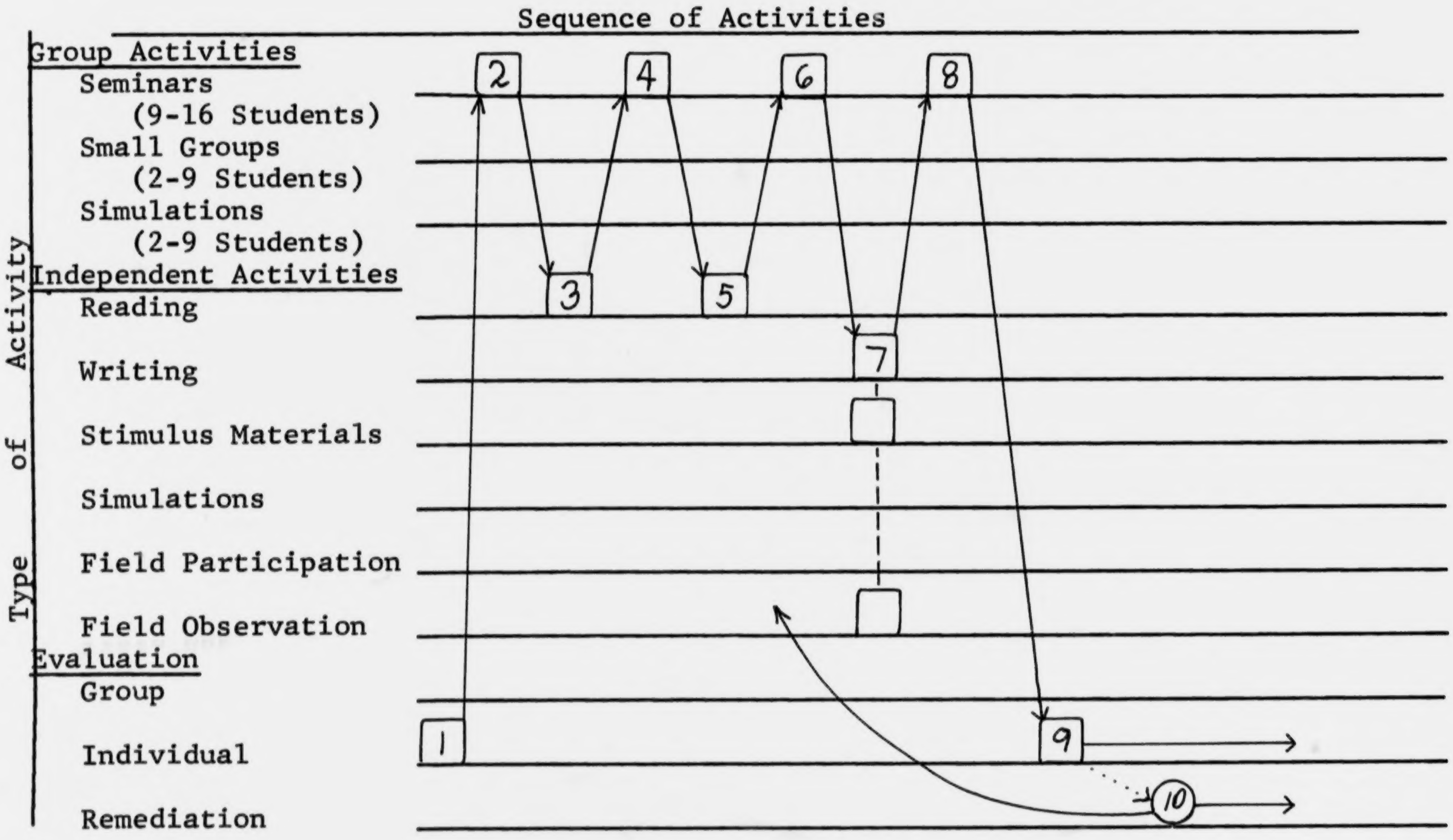
7. Application assignment: Some activity on the order of analyzing the problem of instituting a particular change in a school system by a young faculty member might be undertaken. This would require an analysis of the school system in terms of the conceptual apparatus emerging from the study of the school as a bureaucratic institution. Some students might study actual schools; most would probably use some sort of mediated stimulus material.

8. Seminar meeting: The central thrust of this session would be to relate the application assignment to the range of concepts and distinctions dealt with throughout the module. Hopefully the application assignment plus this discussion would provide the integrative fulcrum for this module.

9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-8
Figure 8.8


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-9: Situations--the Teacher, the Professional, and the Public

I. Prerequisites: SCF-8.

II. Placement of Module: Senior, professional year.

III. Estimated Time: Student time--35 hours.
University faculty time--12 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general objective of this module is to acquaint students with, and get them involved in, the questions being raised today about the role of experts in society in general, and in education in particular. The general objectives of this module should prepare the student to do the following:

A. Explain conflicting views of what constitutes legitimate educational authority.

B. Summarize certain basic arguments as to what constitutes educational professionalism, e.g., Lieberman's argument.

C. Explain why educational professionalism is sometimes viewed by segments of the public as paternalism.

V. Modular Flow Chart: See Figure 8.9.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:
    a. Have additional instruction prior to taking this module.
    b. Study all or selected portions of this module.
    c. Proceed to the post-test or following module.

2. Seminar meeting: This time will be used to orient students to the module, i.e., to explain objectives, type of activities, role of the seminar, etc. A reading assignment will be given at the end of the seminar meeting.

3. Reading: The central question of this particular module can be cast as, "What is the place of the expert in a democratic society?" An initial suggested reading that may well be more provocative than profound is Lieberman's, The Future of Public Education. More profound and equally relevant is Carr's, "From Individualism to Democracy" (found in Blackington and Patterson, School, Society and the Professional Educator, pp. 266-278). Students would be asked to frame tentative generalizations on the basis of their reading.

4. Seminar meeting: The major focus of the seminar would be a discussion of the readings. Pedagogically speaking, it has been found useful to focus on particular problems (ideological and strategic) in this area, and then to bring the readings to bear on these problems. Questions such as the following would be raised.

    a. Strikes--This activity is seen by school boards as a threat to their legal authority and power. What constitutes a strike? How is it distinguished from a counterstrike? Are the teachers' organizations the only ones who strike against the schools? Is a business, threatening to move in the face of increased taxes, going on strike? Can either behavior be justified? If yes, under what conditions?

    b. Individual freedom--Within the teaching community, as an occupational group, there is an increasingly explicit set of standards. These include such things as certification requirements, salary schedules, tenure regulations, ethical codes, master contracts, etc. Are these signs of a decline in the democratic spirit? What is the basis for the different possible answers to this question?

5. Reading: Carefully selected readings dealing with the general question of autonomy and the justification of the claims to autonomy are called for here. Illustrative of readings which deal with these points are: Spencer's, "The Right to Ignore the State"; Tussman's, "The Office of the Citizen"; and Barnett and Otis', "The Authority of Education".* The attention of the student is directed to the issue of locus or loci or authority in a democratic society.

6. Seminar meeting: The major activity here would be the discussion of conceptualizations introduced and explained in the readings. Some examples of "problems" which could be used to help students test their generalizations and understandings are as follows:

    a. Curriculum decision--If a community decided to have "evolutionary theory" taught in the schools, would each child have a right to his own opinion about its validity? Are truth and belief interchangeable terms? If the community had decided differently, would this affect the truth value of the theory or its status as a legitimate part of the curriculum?

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* The items listed here are all included in Blackington and Patterson, School, Society, and the Professional Educator.

b. Professional ethics--If you were selected to serve on a social studies curriculum committee, and had the time and interest in so serving, would there be any reasonable basis for calling your participation unethical or unprofessional? Would you accept any reason for the charge? Which would constitute legitimate authority--your acceptance or the reasons?

7. Reading: Carefully selected readings addressed to the possible conflict of conceptions of authority with conceptions of freedom would be used here. One man's authority is another man's authoritarianism. An examination of this issue is both an intellectual and a political necessity for the teacher. The following readings are appropriate, but in no sense exhaustive of the available literature: Rand's, The Fountainhead, pp. 736-743; Barnett's, The Idea of Liberty; Dewey's, Liberty and Social Control. Attention should be directed, one is reminded, to the conceptual relations between authority and liberty and the implication of this relationship for the teacher.

8. Seminar meeting: The major activity of the seminar would be a discussion of the various ways of relating the conceptualization in question (i.e., freedom and authority). Questions or issues concerning segregation, academic freedom, "permissive" teachers, etc., could be developed, much as in (6) above. Such questions and issues should help clarify for students the relationship between a conception of freedom and a conception of authority.

9. Reading time: In addition to the conflicts over the relations between authority, there are those concerning the relation of freedom and equality. This conceptual issue underlies many of the contemporary policy debates concerning appropriate educational opportunity. Reading materials on this topic abound. The readings selected should make clear to the students the convergence and clash of these concepts.

10. Seminar meeting: The major activity of the seminar would be a discussion of the various ways of relating the two concepts in question, (e.g., freedom and equality). Again, a fruitful way to proceed is by casting the issue in "problem" form. Questions or issues concerning such ideas as fairness, sameness, means and ends, and the learnings of such ideas on the conflicting concepts of the relationship of freedom and authority should be developed.

11. Application assignment: While this assignment is formally listed at this point, there are good reasons to argue that it be placed earlier in the module. An appropriate case that

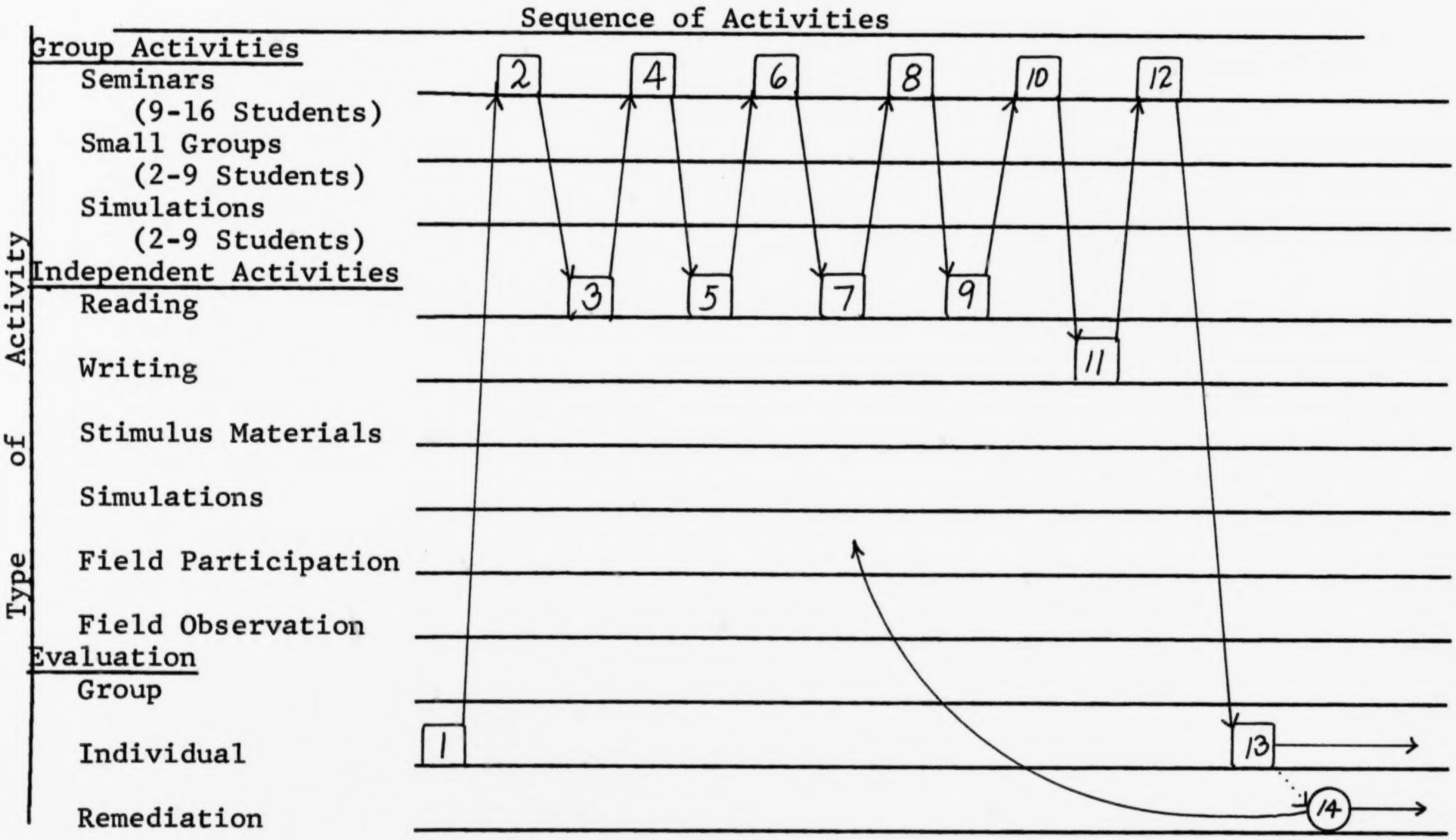
would allow a rather exhaustive analysis in reference to the cumulative conceptual development occasioned by participation in the Module Group #3 is appropriate.

12. Seminar meeting: The focal activity of this meeting would be a critique of selected analytical papers written by the students. As is the case with the papers themselves, the activity is designed to integrate the various elements of the module and to provide feedback to students.

13. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

14. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-9
Figure 8.9


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-10: Conceptualizing the Language and Logic of Instruction

I. Prerequisites: SCF-9.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--15 hours.
University faculty time--6 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general objectives of this module are: (a) to acquaint the students with some of the literature in the field, and (b) to provide students with some conceptual apparatus with which to view the language and logic of instruction. The general objectives of this module should prepare the student to do the following:

A. Analyze a video tape of a classroom situation using the conceptual scheme and terminology developed by B.O. Smith.

B. Analyze a video tape of a classroom situation using the conceptual scheme and terminology developed by Bellack.

C. Analyze a video tape of a classroom situation using the conceptual scheme and terminology developed by Thomas F. Green. (This would probably be limited to distinguishing among those acts of a teacher which could be classified as strategic, those which could be classified as logical, and those which could be classified as institutional).

D. Given any one of the above video tapes and analysis, students could show how the analysis would differ if another conceptual scheme were used.

V. Modular Activity Flow Chart: See Figure 8.10.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. First seminar of the module: Purpose of this seminar is to orient students to this module. Orientation will include an explanation of the objectives and a description of the activities.

3. Reading: This assignment will be reading selections from B.O. Smith's work on the logic of teaching. This might be supplemented by other treatments of Smith's work, e.g., chapter 2 in J.R. Verduin's, Conceptual Models in Teacher Education.

4. Seminar: On the basis of the reading, students will be asked to draw generalizations about the logic of teaching and about observing and analyzing that logic. Some short segments of video tapes of classes should be available which illustrate the concepts, and can be used to give students practice in applying these concepts.

5. Application assignment: Individual practice in analyzing the logic of segments of video taped instruction.

6. Seminar: Major purposes here would be to provide students with an opportunity to raise questions and to receive feedback and to provide the instructor with feedback on student progress and problems.

7. Reading: This assignment would be to read selections from the work of Arno Bellack on the language of the classroom. This could be supplemented by other treatments of Bellack's work such as chapter 6 in J.R. Verduin's, Conceptual Models in Education.

8. Seminar: This seminar will treat the Bellack material, as the seminar in activity 4 treated the Smith reading. It would be useful to have video taped segments of classes which would serve to illustrate the concepts and provide a semi-controlled setting which could be used for practice analysis by the students.

9. Application assignment: Individual practice in using the Bellack concepts and terminology to analyze video taped segments of one of his lessons.

10. Seminar: This would be a short seminar in which students would be encouraged to raise questions about the Bellack material and its application, and would be provided with feedback.

11. Reading: This assignment would be to read T.F. Green's, "The Activity of Teaching" from An Introduction to the Philosophy of Education (forthcoming from McGraw-Hill).

12. Seminar: Major purposes would be to discuss, clarify and practice applying the concepts from the reading.

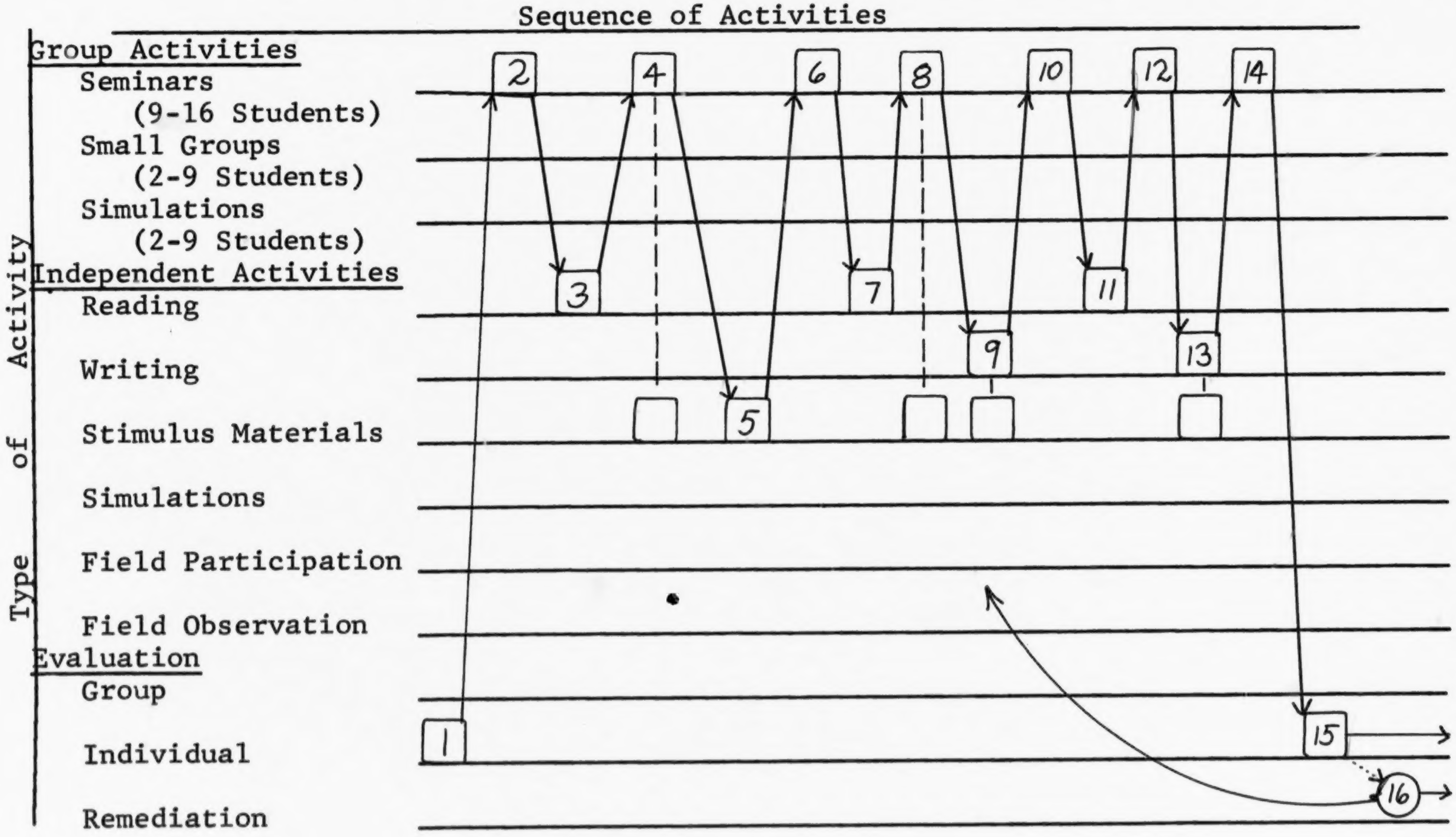
13. Application: The purpose of this assignment would be to provide opportunity for individual practice in applying Green's concepts to an instructional situation. Again, it would be useful to have short video tapes or a type script of a lesson to serve as cases for analysis.

14. Seminar: Students would again be encouraged to raise questions and discuss the problems of Green's conception of the instructional process in schools. The latter part of the seminar would be used to encourage students to summarize and draw tentative generalizations about the material in this module, and to compare, contrast, and discuss the relative merits and weaknesses of the three conceptualizations.

15. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

16. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-10
Figure 8.10


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-11: Applying the Language and Logic Skills Developed in Module Group #2 to a Classroom Setting

I. Prerequisites: SCF-10.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--12 hours.
University faculty time--5 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objectives of this module are: (a) to renew the language and logic skills and concepts dealt with in Module Group #2, and (b) to develop the ability to apply these concepts and skills in the analyzing of actual instructional language. The general objectives of this module should prepare the student to do the following:

A. Given a script of a lesson or a video tape, the student could correctly identify:

1. The following types of statements or claims:

   a. preference
   b. analytic
   c. empirical
   d. value
   e. metaphysical

2. Fallacious statements

3. Metaphorical statements

4. The following types of definitions:

   a. stipulative
   b. descriptive
   c. persuasive or programmatic

B. In addition to the above identifications, using the criteria specified earlier, students would be able to apply those criteria in evaluating:

1. Metaphors
2. Definitions
3. "Cases" offered for particular claims

V. Modular Activity Flow Chart: See Figure 8.11.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

    a. Have additional instruction prior to taking this module.
    b. Study all or selected portions of this module.
    c. Proceed to the post-test or following module.

2. First seminar of the module: Purpose of this seminar is to orient students to this module. Orientation would include: (a) showing how the material in the preceding module is related to the content of the module, and (b) explaining the objectives and activities of this module.

3. Video lecture: "Using certain language and logic skills in analyzing the language of instruction." This lecture would: (a) review the skills and concepts from Module Group #2, and (b) provide examples of how these were to be usefully applied in analyzing the language of the classroom.

4. Seminar: Major purposes of this seminar would be to: (a) discuss lecture material and answer student questions about that material, (b) provide students with feedback following their attempts to explain and apply the concepts and skills, (c) provide the instructor with feedback concerning student understanding, and (d) to provide students with an opportunity as a group to analyze a segment of a script of a classroom lesson using the skills and concepts from the lecture.

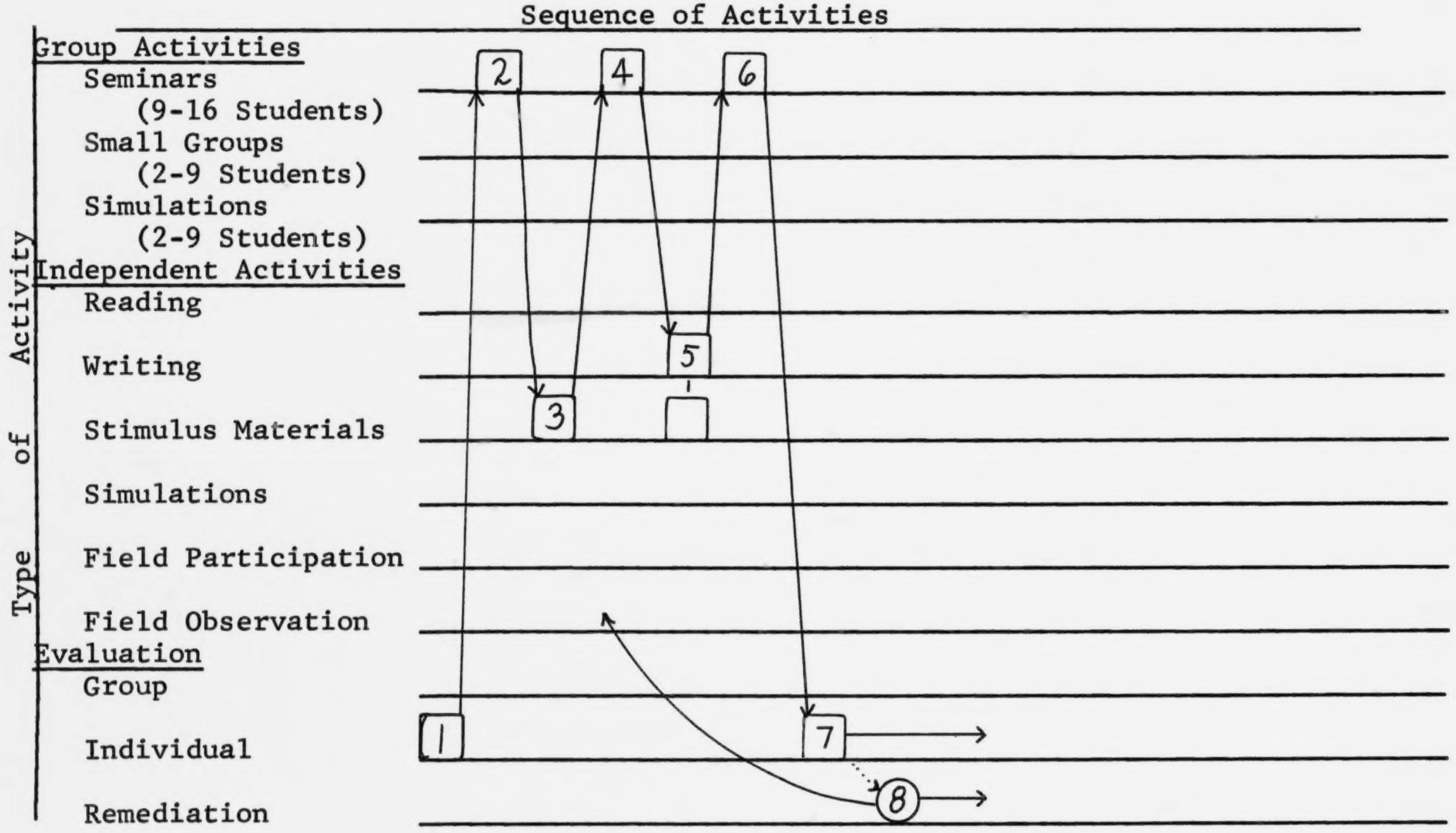
5. Application-practice: This would be an assignment which would call for individual practice in applying the concepts and using the skills. Students might begin by analyzing segments of video taped examples of their lessons.

6. Seminar: Major purposes of this seminar would be: (a) to allow students to raise questions and receive feedback about the use of these concepts and skills, (b) provide the instructor with feedback about students' progress, and (c) to encourage students to summarize the concepts from this module in an attempt to show how this module is related to others.

7. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

8. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-11
Figure 8.11


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-12: The Activity of Judging: Making and Evaluating Judgments in the Classroom

I. Prerequisites: SCF-11.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--12 hours.
University faculty time--5 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objectives of this module are: (a) to aid students in developing an understanding of the concepts of judgment as explicated by T.F. Green, and (b) to aid students in developing the skill to apply Green's concept of judgment in analyzing classroom instruction, including both the identification and the evaluation of judgmental statements and the grounds for those statements. The general objectives of this module should prepare the student to do the following:

A. Students could summarize Green's notion of judgment, and in their summary would show that concept of judgment differs from the concepts of knowing, guessing, and preferring.

B. Given a script of a lesson, students would be able to:

1. Identify instances of judgments and incidents which resemble judgments but are in fact mere guesses or preferences.

2. Identify instances of mistaken judgments, i.e., judgments which are not supported by the reasons given by the person making the judgment.

V. Modular Activity Flow Chart: See Figure 8.12.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. First seminar of the module: Purpose of this seminar is to orient students to this module. Included in this orientation would be: (a) explanation of the objectives of the module, (b) description of the activities of the module, and (c)

explanation of how prior modules are related to this one.

3. Reading: Assignment would be to read carefully and study "The Activity of Judging" by T.F. Green in An Introduction to the Philosophy of Education (forthcoming from McGraw-Hill).

4. Seminar: Major activities would be: (a) discussion of and questions about the reading, and (b) some practice as a group in using this concept of judgment in analyzing and evaluating segments of the language of the classroom. A prepared script which contains clear instances of the various sorts of judgments would be used for this group practice.

5. Individual application and practice: This would be an assignment which calls for individual practice in applying Green's notions of judgment in analyzing and evaluating segments of the language used in class instruction. Scripts would be used, and these scripts would be arranged so that clear instances of various sorts of judgments and the grounds upon which those judgments are made are relatively apparent.

6. Seminar: Major purposes would be to: (a) encourage students to raise questions and receive feedback on the basis of their experiences in the practice session, (b) to provide the instructor with feedback concerning students' progress, and (c) to have students discuss additional purposes which may be observed by paying close attention to this concept.

7. Individual Application and Practice: A number of assignments might be used here. Among them are the following:

    a. Practice applying the concepts and skills using video tapes of their own classrooms.

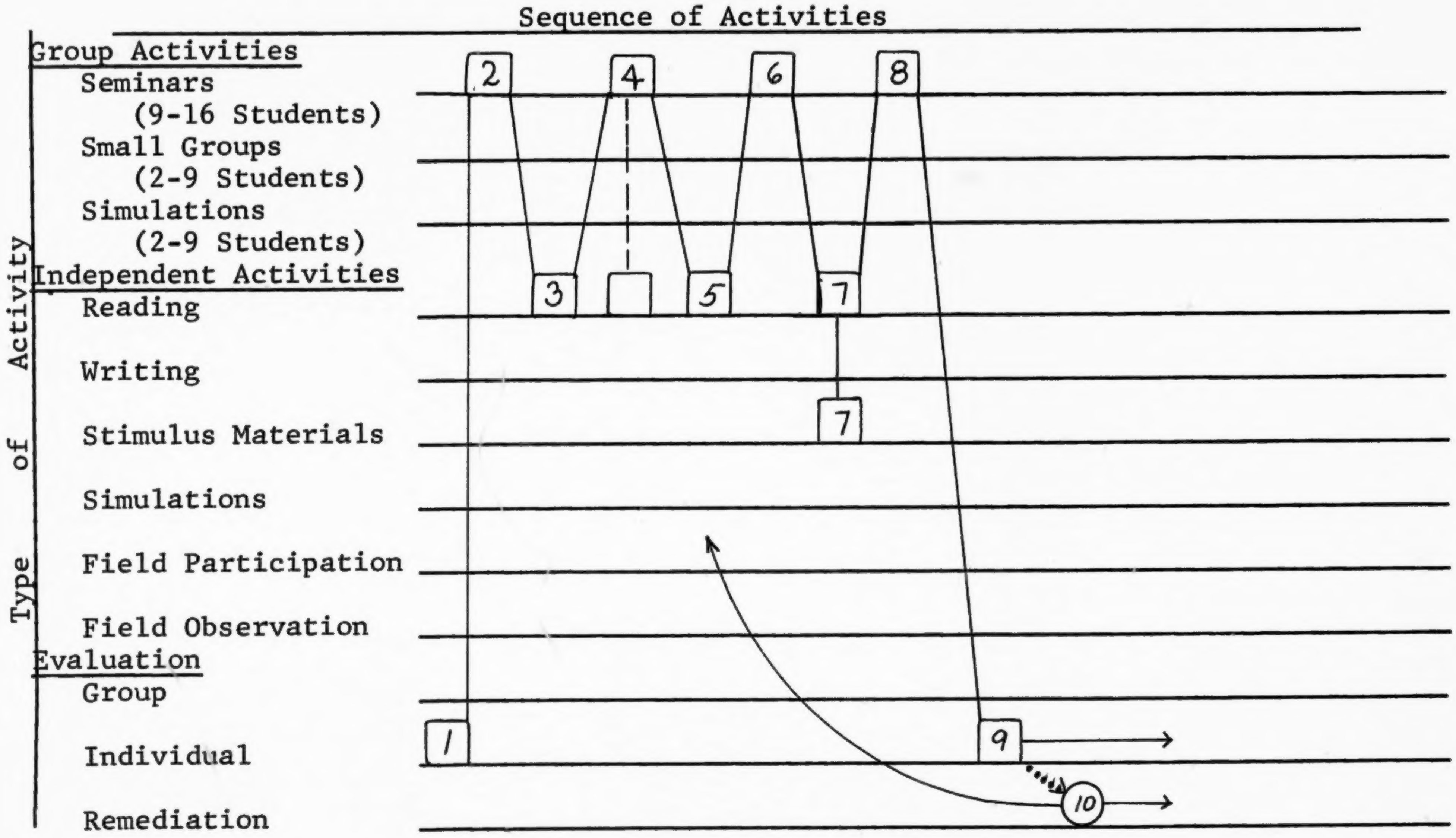
    b. Practice applying the concepts and skills using case studies calling for decisions and asking students to make judgments about what decisions should be made, giving appropriate grounds for those judgments.

8. Seminar: Major purposes of this seminar would be to: (a) provide students with appropriate feedback on their performance in the practice session, and on their questions and comments during the seminar; (b) provide instructors with feedback concerning students' progress; and (c) have students generate and examine tentative generalizations about the concepts and skills and their usefulness.

9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-12
Figure 8.12


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-13: The Activity of Explaining: Giving and Evaluating Explanations in the Classroom

I. Prerequisites: SCF-11.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--12 hours.
University faculty time--5 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objectives of this module are: (a) to acquaint students with various kinds of explanations and the criteria with which to evaluate these explanations, (b) to aid students in applying the developed skill to identify, in the context of a classroom lesson:

(1) When an explanation is required and what sort of explanation it should be.

(2) Instances of explaining.

(3) Appropriateness and adequacy of the explanations given.

and (c) to aid students in developing the skill to construct appropriate explanations when these explanations are called for. The general objectives of this module should prepare the student to do the following:

A. List various kinds of explanations (sequential, mechanical, procedural, normative, causal, teleological) and give examples of adequate explanations of each kind.

B. Given a script of a lesson, students will: (a) identify instances of explanations, (b) make judgments as to whether the right kind of explanation is given, and (c) make judgments about the adequacy of definitions given.

V. Modular Activity Flow Chart: See Figure 8.13.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. First seminar of the module: Purpose of this seminar is to orient students to this module. This orientation would include: (a) explanation of the objectives of this module, (b) brief description of the activities to be included in the module, and (c) explanation of how the material in this module is related to the material in the preceding modules.

3. Reading: Basic reading assignment would be material such at T.F. Green on types of explanations and their evaluation in An Introduction to the Philosophy of Education, or the section on explanation from J. Saltis, The Analysis of Educational Concepts. The section on explanations in L. Brown's, General Philosophy in Education would also be useful as would selections from Smith and Ennis', Language and Concepts in Education.

4. Seminar: Major activities in this seminar would be: (a) discussion of and questions about the readings, and how the concepts in the reading might be usefully applied in classrooms, (b) some practice as a group in identifying and evaluating certain explanations. Scripts of lessons would be used for this, (c) viewing and discussing the filmstrip "Explaining" in the Professional Education Series.

5. Individual application and practice: Using prepared scripts containing various kinds of explanations, students would practice identifying and evaluating the various kinds of explanations given in an actual classroom situation using video tapes of their classroom.

6. Seminar: Major purposes would be to: (a) encourage students to raise questions and receive feedback on the basis of their experiences in the practice session, and (b) to provide the instructor with feedback concerning student progress.

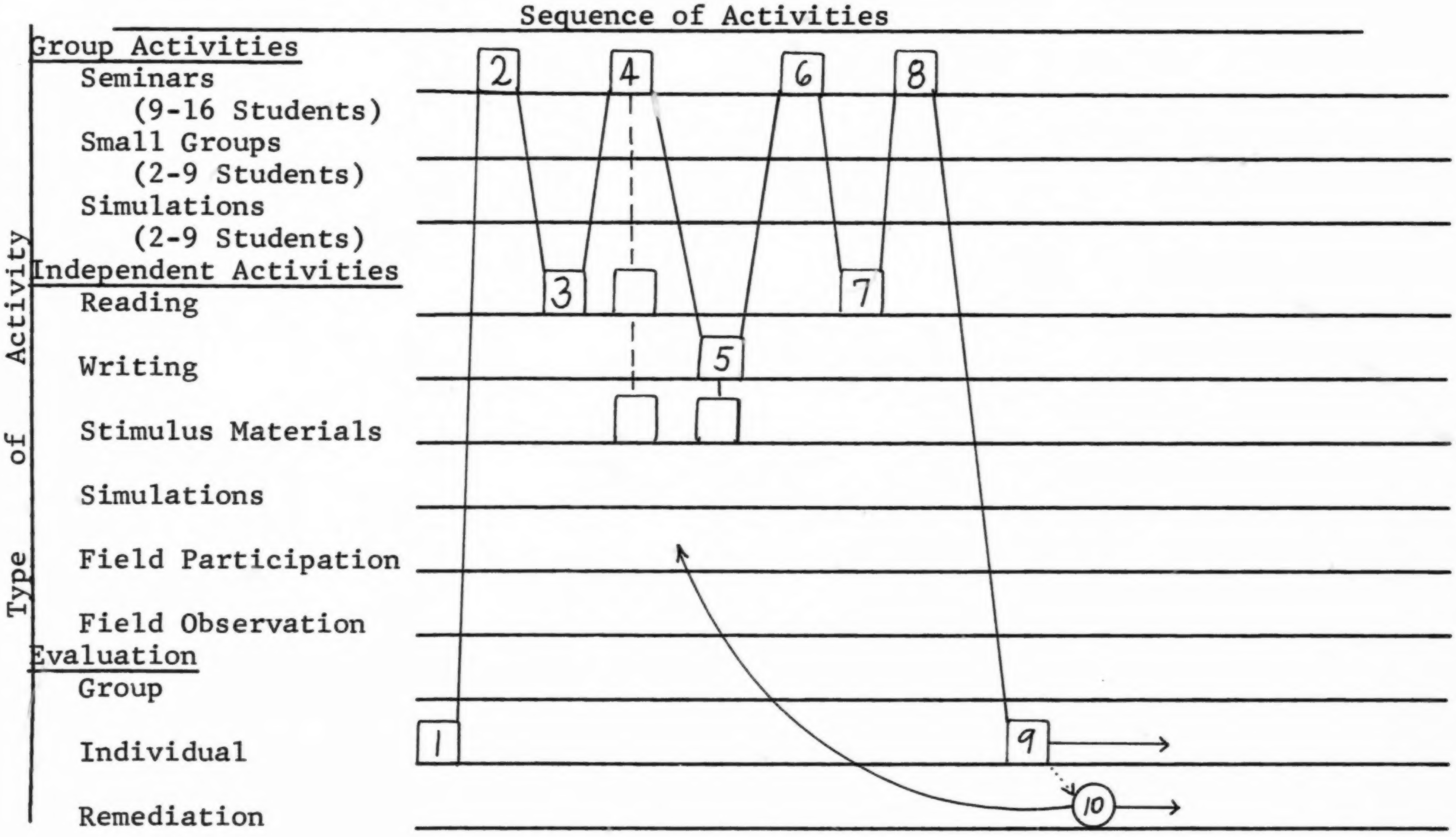
7. Individual application and practice: This would be an assignment for teachers to use the concepts from the module to construct explanations themselves which are both adequate and appropriate for use in an elementary classroom.

8. Seminar: Major purposes would be to: (a) provide students with feedback on their practice assignments, (b) to provide instructors with feedback about students' progress, and (c) to discuss further applications of the concepts dealt with in this module.

9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-13
Figure 8.13


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-14: The Activity of Questioning: Asking, Answering and Evaluating Questions in the Classroom

I. Prerequisites: SCF-11.

II. Placement of Module: Resident year.

III. Estimated Time:
Student time--15 hours.
University faculty time--6 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objectives of this module are to: (a) acquaint the students with some ways of categorizing questions, (e.g., John Wilson's categories of value questions, factual questions, and conceptual questions), (b) to aid students in developing skills in categorizing and properly evaluating questions, (c) to aid students in integrating all of the concepts and skills dealt with in the module group and to give them an opportunity to practice all of these skills in analyzing a classroom situation. The general objectives of this module should prepare the student to do the following:

A. Given a series of questions, students could correctly distinguish among factual, value and conceptual questions.

B. Given a conceptual question, students could bring to bear the analytic techniques described by John Wilson in dealing with that conceptual question.

C. Given a script of a lesson, students will identify instances of factual, value, and conceptual questions, and will determine whether the questions are answered with appropriate evidence.

V. Modular Activity Flow Chart: See Figure 8.14.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. First Seminar of the Module: Purpose of this seminar is to orient students to the module. This orientation would include: (a) explanation of the objectives of the module, (b) brief description of the activities in the module, and (c) explanation of how the material in this module is related to the material in the preceding modules.

3. Reading: Assignment would be selections on the logic of questions from works such as John Wilson's, Thinking with Concepts.

4. Seminar: Major activities in this seminar would be: (a) discussion of questions about the reading, and about how the concepts in the reading might be usefully applied in a teaching situation, and (b) some practice as a group in identifying different kinds of questions and procedures to be used in dealing with what Wilson calls "Questions of Concept". Scripts of lessons would probably be used as the basis for the latter activity.

5. Individual practice and application: Using prepared scripts, students would practice identifying various sorts of questions. Following this, students would be given practice in dealing with questions of concept using the techniques discussed and illustrated by Wilson.

6. Seminar: Major purposes of this seminar would be: (a) to provide students with feedback concerning their performance and questions and concerns they may have, and (b) to provide instructors with feedback concerning student performance.

7. Video lecture: The purpose of this lecture would be to give an overview of all the concepts and skills dealt with in this module group and to give an example of how this might be used in analyzing and evaluating the language of instruction.

8. Seminar: Major activity would be a discussion of the lecture. Students would be given the opportunity as a group to practice, using a prepared script, and all of the concepts and skills covered in the module group in analyzing and evaluating a segment of language usage from a classroom setting.

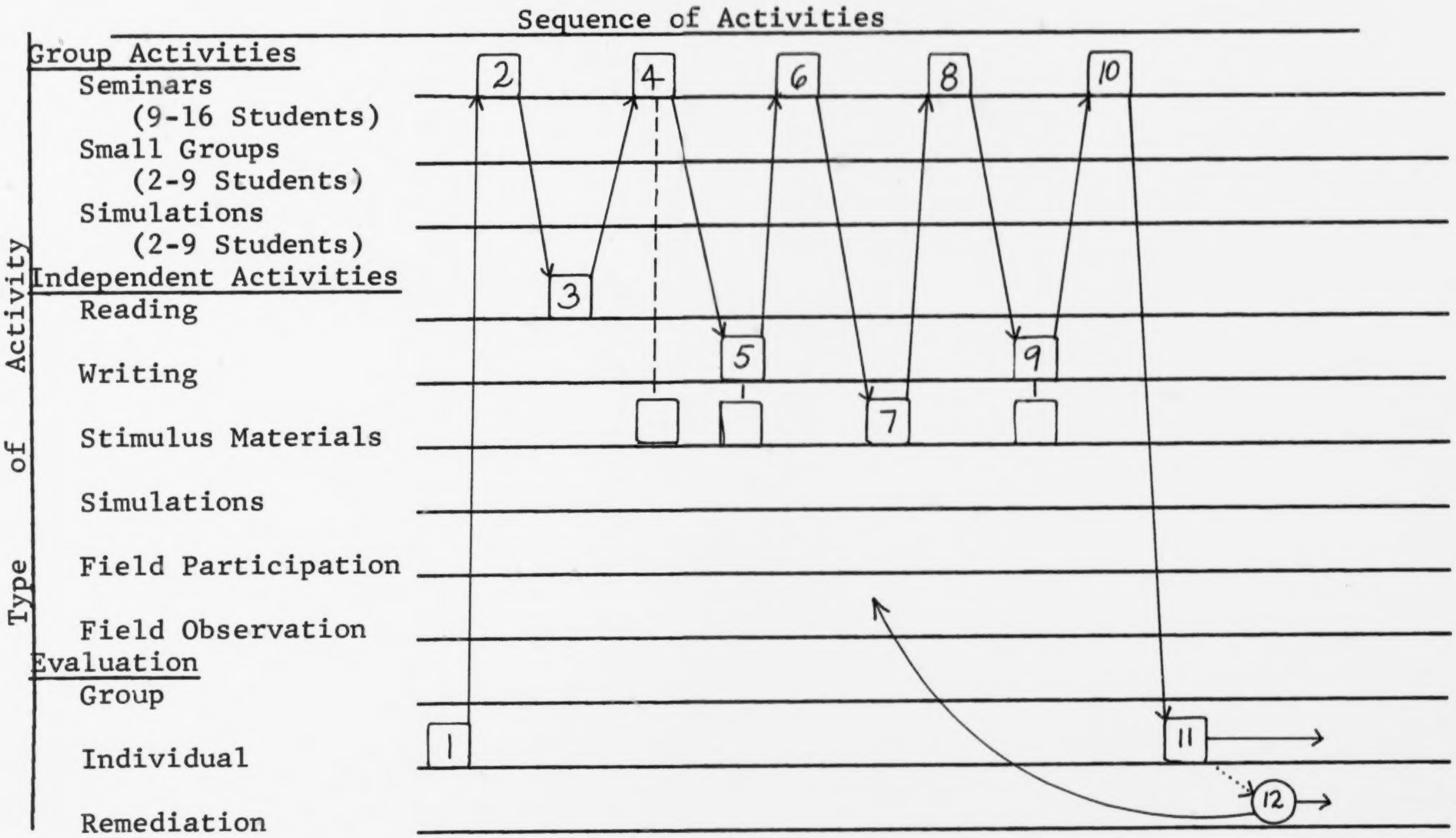
9. Individual application and practice: Using prepared scripts students would continue their practice in analyzing and evaluating the language of instruction. They might be asked to go beyond analysis of scripts to an analysis of video taped instruction, perhaps of their own teaching.

10. Seminar: Major purposes would be feedback and integration.

11. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

12. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-14
Figure 8.14


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-15: Technological Change--Material Sophistication and Social Naiveté

I. Prerequisites: SCF-12, 13, 14.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--22 hours.
University faculty time--8 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objective of this module is to develop students' abilities to recognize, describe and give a general analysis of the major social changes resulting from the so-called "technological revolution", and the impact of these changes on schooling. The general objectives of this module should prepare the student to do the following:

A. Identify and explain major social changes which place a strain on traditional patterns of schooling, e.g.,

1. Urbanization-suburbanization patterns
2. "Revolt" of the young in the U.S.
3. Changes in the occupational structure
4. Increased geographic economy
5. Growth of the consumption economy
6. Quest for social justice: race and poverty
7. "Knowledge explosion"
8. Increase of leisure time

B. Identify implicit values in particular technological innovations, and show how these values either support or conflict with the accumulated values of the culture.

V. Modular Activity Flow Chart: See Figure 8.15.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:
    a. Have additional instruction prior to taking this module.
    b. Study all or selected portions of this module.
    c. Proceed to the post-test or following module.
2. Orientation seminar: Will include an explanation of the objectives and activities.
3. Video lecture: This will be an overview lecture dealing with what has happened, and is happening, as a result of the so-called technological revolution.

4. Selected video tapes treating aspects of the technological revolution: Selected TV programs will be pedagogically useful here, e.g., programs from the "Twenty-First Century" series, CBS Documentary on Cities, etc.

5. Seminar: Purpose will be discussion and clarification of material in lecture and other TV tapes.

6. Reading: Readings will be selected to aid students in moving from description (What's happening?) to conceptualization (How are we to understand what is happening?). Some examples of books which would be useful are Harold Hodgkinson's, *Education, Interaction and Social Change*; Burton Clark's, *Educating the Expert Society*; and Kimball and McClellan's, *Education and the New America*.

7. Seminar: Purposes will be discussion and clarification of readings and applications of the conceptualizations to the problems of education.

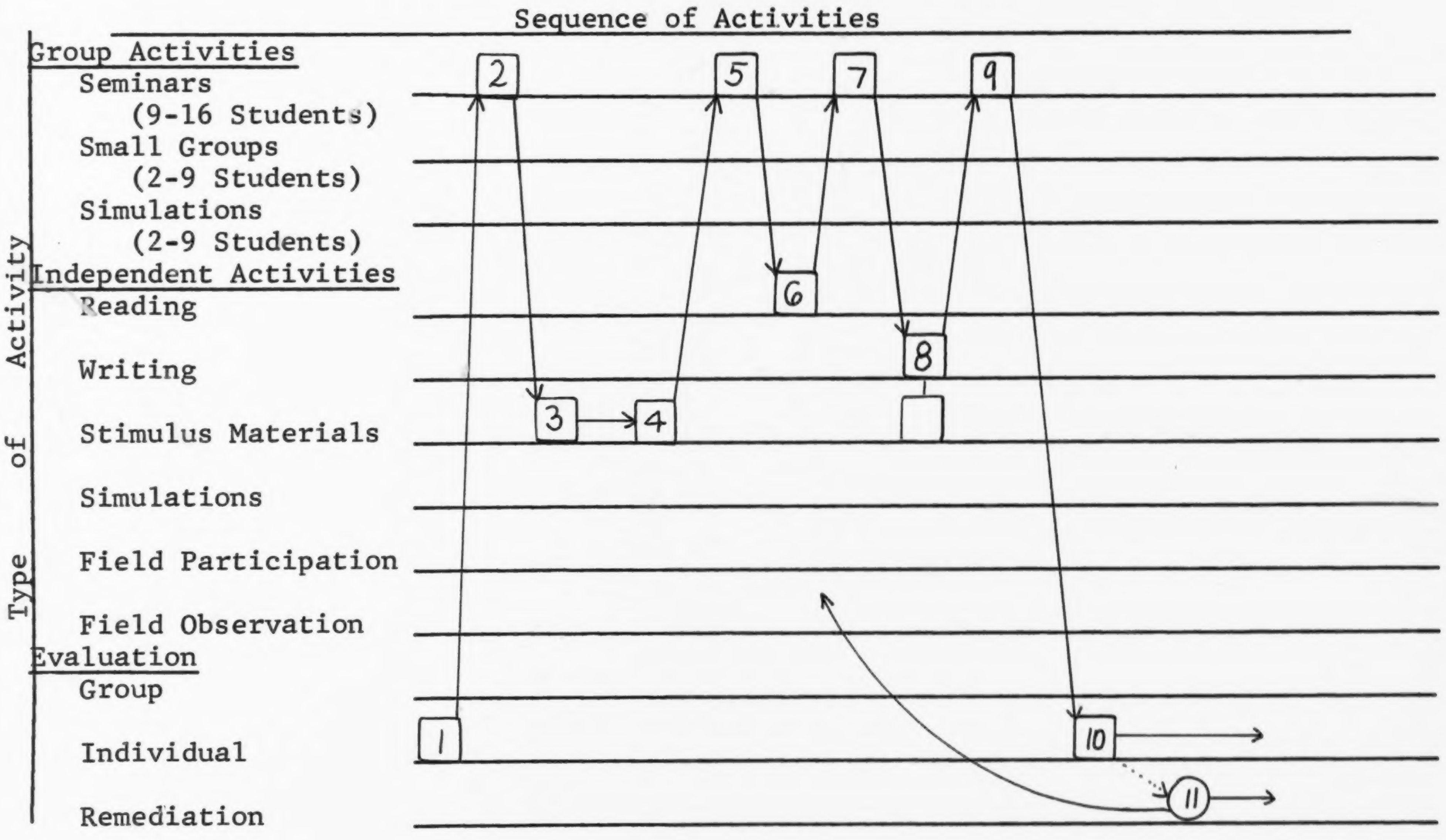
8. Application paper: Students will be given an assignment to write a short paper in which they use some of the conceptual apparatus discussed in the readings and the seminar in making a decision about some educational problem. A case study calling for a decision may be used as the basis for this paper.

9. Seminar: Purpose will be to discuss the application papers.

10. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

11. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-15
Figure 8.15


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-16: Contemporary Urbanization-Suburbanization and the Educational Process

I. Prerequisites: SCF-15.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--20 hours.
University faculty time--8 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objectives of this module are to: (a) increase student knowledge of how urbanization-suburbanization patterns are changing and how these changes are affecting schools, (b) acquaint students with the policy questions which are being raised as a result of this shifting pattern, and (c) get students involved in serious discussions of the normative questions involved. The general objectives of this module should prepare the student to do the following:

A. Explain how contemporary patterns of urbanization-suburbanization have affected:

1. The financing of schools
2. The clientele of city schools-clientele of suburban schools
3. The control of schools
4. Patterns of teacher mobility
5. Curriculum
6. Latent functions of schools

B. Explain the relationship between patterns of urbanization-suburbanization and other selected education problems, e.g.,

1. Drop-out problem
2. School as primary means to social mobility
3. Racism in American society
4. "Elitism" in schools

V. Modular Activity Flow Chart: See Figure 8.16.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. Orientation seminar: Purposes in this seminar are to explain the objectives of the module and to describe the activities which will be assigned.

3. Video tape: What is needed here is descriptive material which makes clear some of the central patterns of development in American cities, and the problems created for schools by that development. Many such materials are available and others could be developed. At the time of this writing one of the best would be the three-hour CBS documentary on "Cities" (June 24, 25, 26, 1968). This series will be cited here for illustrative purposes. First one-hour segment of the CBS documentary entitled "Cities".

4. Seminar: Purpose of this seminar will be to discuss the video tape. Emphases will include attention to value questions.

5. Video tape: Second one-hour segment of the CBS documentary entitled "Cities".

6. Seminar: Purpose of this seminar will be to discuss questions raised by the video tape. Emphases will include attention to value questions.

7. Video tape: Third one-hour segment of the CBS documentary entitled "Cities".

8. Seminar: Purposes of this seminar will be to discuss questions raised by the video tape and to frame tentative generalizations on the basis of the three tapes and the seminar discussions.

9. Reading: Readings should be selected which aid students in better conceptualizing the problems they have been discussing and in applying the information discussed to problems of schooling. Among the readings which would serve this purpose are Havighurst's, Education in Metropolitan Areas; Chandler, Styles and Kitsuse's, (Eds.), Education in Urban Society; Haworth's, The Good City; Hadden, Mascotti, and Larson's, Metropolis in Crisis.

10. Seminar: Purposes of this seminar will be to discuss questions raised by the readings and to examine again the tentative generalizations drawn in the preceding seminar.

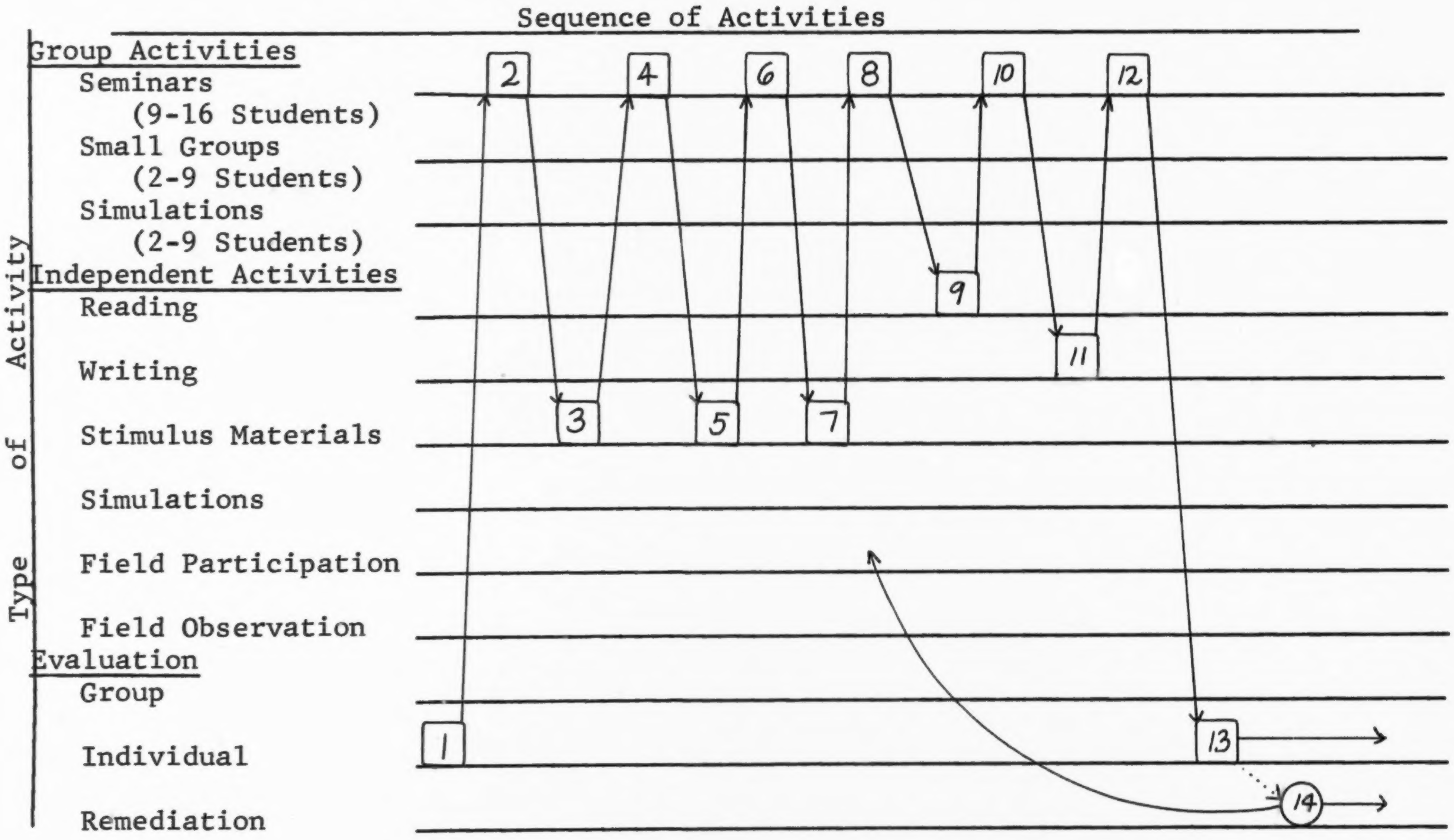
11. Application paper: Purpose will be to have students apply the concepts they have developed. A case study calling for a decision and involving some of the factors discussed will probably be used.

12. Seminar: Purposes of this seminar would be to discuss the application papers and provide feedback to students.

13. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

14. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-16
Figure 8.16


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-17: Race and Poverty--American Dream Generates a Nightmare or American Nightmare Generates a Dream?

I. Prerequisites: SCF-15.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--22 hours.
University faculty time--8 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: Major objectives of this module are to increase student awareness of: (a) the present complex relationship between race and educational opportunity, (b) the present complex relationship between poverty and educational opportunity, and (c) those forces in schools and in the wider society which; (1) require that increased attention be paid these problems, and (2) which encourage a continuation of the present tendencies in schools to serve certain social, cultural and racial groups less well than it serves members of the dominant society. The general objectives of this module should prepare the student to do the following:

A. Identify common school practices which work to the disadvantage of certain groups (e.g., heavy reliance on I.Q. tests with little recognition of their cultural bias; equating of "good behavior" with "middle class" behavior; responding to deviant behavior with punishment rather than education, etc.).

B. Utilize appropriate research results when asked to explain the impact of racial segration/integration on school achievement.

C. Explain how the problem of racial isolation in schools is connected to the problems of: (a) patterns of contemporary urban development, (b) the "technological revolution".

V. Modular Activity Flow Chart: See Figure 8.17.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. Orientation seminar: This will include an explanation of the objectives of the module and a description of the activities.

3. Video tape: Purpose here, and in the next video tape, is to provide materials which would give students an overview of the problems of race and poverty as they affect schooling. This could be done in many ways. If the materials can be procured, there are some excellent TV documentaries. Two of these will be cited here as illustrative: The NBC special on "Poverty in America" (Spring, 1968) and the CBS specials on "Black America" (Spring, 1968). Topic will be Poverty in America.

4. Seminar: Purpose will be to discuss the video tape and how the facts of poverty seem to affect the process of schooling.

5. Reading: Readings would be selected which would reinforce and supplement the material discussed in the tape and in the seminar group. Readings should also provide students an opportunity to test some of the tentative generalizations drawn in the seminar. Among the readings which would serve well are Harrington's, The Other America; Sexton's, Education and Income; Galbraith's, The Affluent Society; and Hadden, Masotti, Larson's, Metropolis in Crisis.

6. Seminar: Purpose will be to discuss the readings, modify generalizations and discuss how the problems discussed in the readings affect the operation of schools.

7. Video tape: Topic will be race and educational opportunity. Some segments of the documentary, "Black America", would serve well here.

8. Seminar: Purpose will be to discuss video tape.

9. Reading: Selections would be used to reinforce and supplement material discussed in the tape and in the seminar. There are numerous readings which would be appropriate, among them the Coleman report, Report of Racial Isolation in the Public Schools, and Report of the National Advisory Commission on Civil Disorders.

10. Seminar: Purpose will be to discuss the reading and examine tentative generalizations concerning the impact of the problems discussed on schooling.

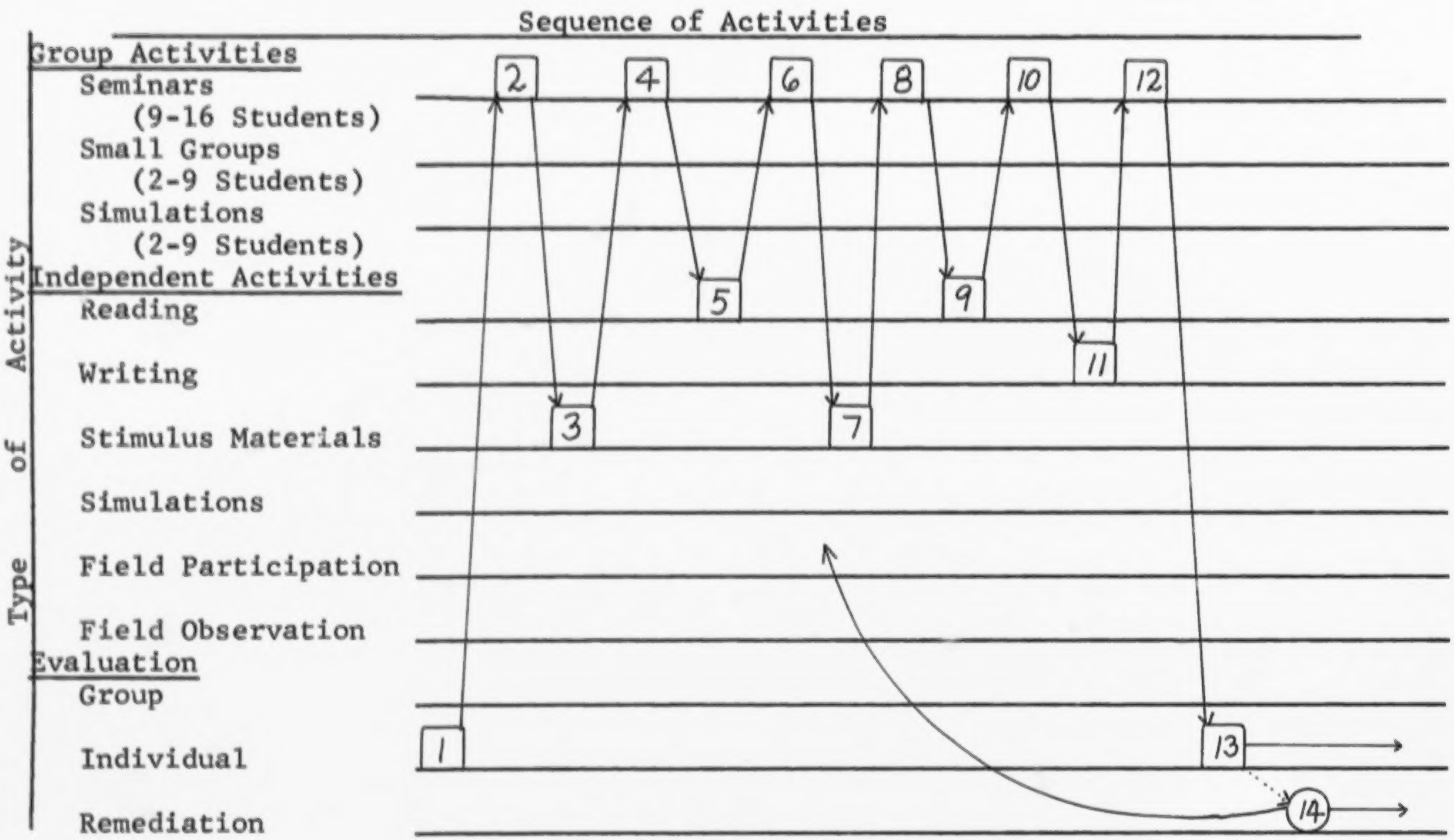
11. Application paper: Students will be asked to write a short paper in which they apply some of the information discussed in analyzing some educational problem. This assignment might well be based on some actual educational problem which is receiving attention at the time.

12. Seminar: Purpose will be to discuss the application papers and to re-examine the tentative generalizations drawn in the course of the module.

13. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

14. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-17
Figure 8.17


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-18: Credentialism and the Allocation of Manpower

I. Prerequisites: SCF-15.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--24 hours.
University faculty time--8 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objective of this module would be to get students to: (a) recognize that a major function of the American school has come to be "credentialing" persons for jobs, and that the credentialing decisions begin early in the elementary school, (b) recognize how the occupational structure in the U.S. has changed and is changing and hence how the "allocation function" of the school may change, (c) recognize the possible discrepancy between the educational certificate required and the knowledge and skill required for a particular job, e.g., the case of the college degree required for a shoe salesman, or high school diploma required for a labor-intensive job, and (d) recognize the relationship between these problems and what was earlier referred to as the "technological revolution". If these general objectives are achieved, then it is expected that the student could, for example:

A. State three effects of credentialism on the curricular and instructional activities performed in the school system in which he is doing his resident teaching.

V. Modular Activity Flow Chart: See Figure 8.18.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:
   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. Orientation seminar: This will include an explanation of the objectives of the module and a description of the activities which will be included.

3. Video lecture: This will be an "overview" lecture on the topic of credentialism and the allocation of manpower.

4. Seminar: Major purpose of this meeting will be to discuss the lecture material.

5. Reading: Readings would be selected to clarify and expand the material covered in the lecture. Some possible readings would include Burton Clark's, Educating the Expert Society; Koernor's, The Miseducation of Teachers, The Rise of the Meritocracy; and E. Friedenberg's, Coming of Age in America. Other articles and selections from books or readings should also be available.

6. Seminar: Major purpose would be to discuss the readings and draw tentative generalizations based on those readings.

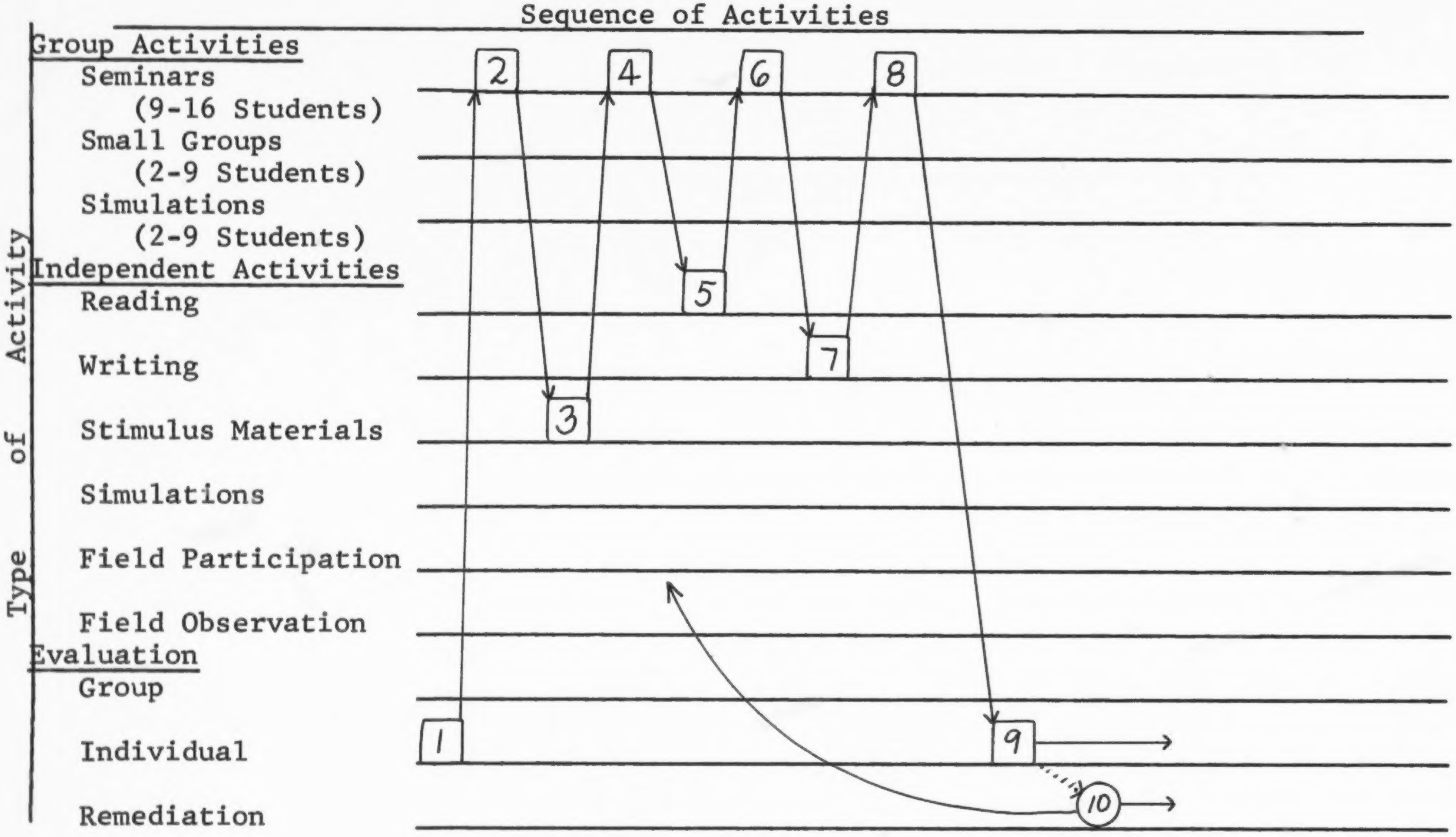
7. Application paper: A short paper will be assigned to provide students with an opportunity to use the information and concepts discussed in analyzing some problem of schooling which is related to the problem of credentialism.

8. Seminar: Purpose will be to discuss application papers.

9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-18
Figure 8.18


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-19: The Generation Gap--A Difference in Degree or Kind?

I. Prerequisites: SCF-15.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--24 hours.
University faculty time--8 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The general objective of the module is to show how the various social problems discussed here have influenced the young in our society. Students would be asked to become familiar with the literature on the "youth sub-culture" and on "student sub-cultures". Attention would be directed to the development of conceptual apparatus to help understand the "revolution" of youth in general and within educational institutions in particular. The general objectives of this module should prepare the student to do the following:

A. Explain the concept of a "youth sub-culture" and show how social forces have led to and support this sub-culture. Included in this explanation would be some reference to: (1) the extension of the adolescent years, (2) the role played by the mass media, (3) the economic support for the youth sub-culture, and (4) the growing role of the youth sub-culture in political and other public policy.

B. Explain how the youth sub-culture in society affects and is affected by the school.

C. Summarize the arguments about student sub-cultures in schools and colleges from works such as B. Clark's, Educating the Expert Society and James Coleman's, The Adolescent Society.

V. Modular Activity Flow Chart: See Figure 8.19.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:
    - a. Have additional instruction prior to taking this module.
    - b. Study all or selected portions of this module.
    - c. Proceed to the post-test or following module.

2. Orientation seminar: This will include an explanation of the objectives of the module and a description of the activities which will be included.

3. Video lecture: This will be on the youth sub-culture and student sub-cultures.

4. Seminar: Major purposes will be to: (a) discuss the lecture material, and (b) raise questions as to how the development of youth sub-cultures affects and is affected by schooling.

5. Reading: Selected readings should be used to clarify and expand material discussed in the lecture and in the seminar sessions. Among the readings which would be useful are Clark's, Educating the Expert Society; Coleman's, The Adolescent Society; Friedenberg's, The Vanishing Adolescent; Spendler's (Ed.), Education and Culture; C. Wayne Gordon's, The Social System of the High School.

6. Seminar: Major purposes would be to discuss the readings and to frame tentative generalizations on the basis of the readings, lecture and discussions.

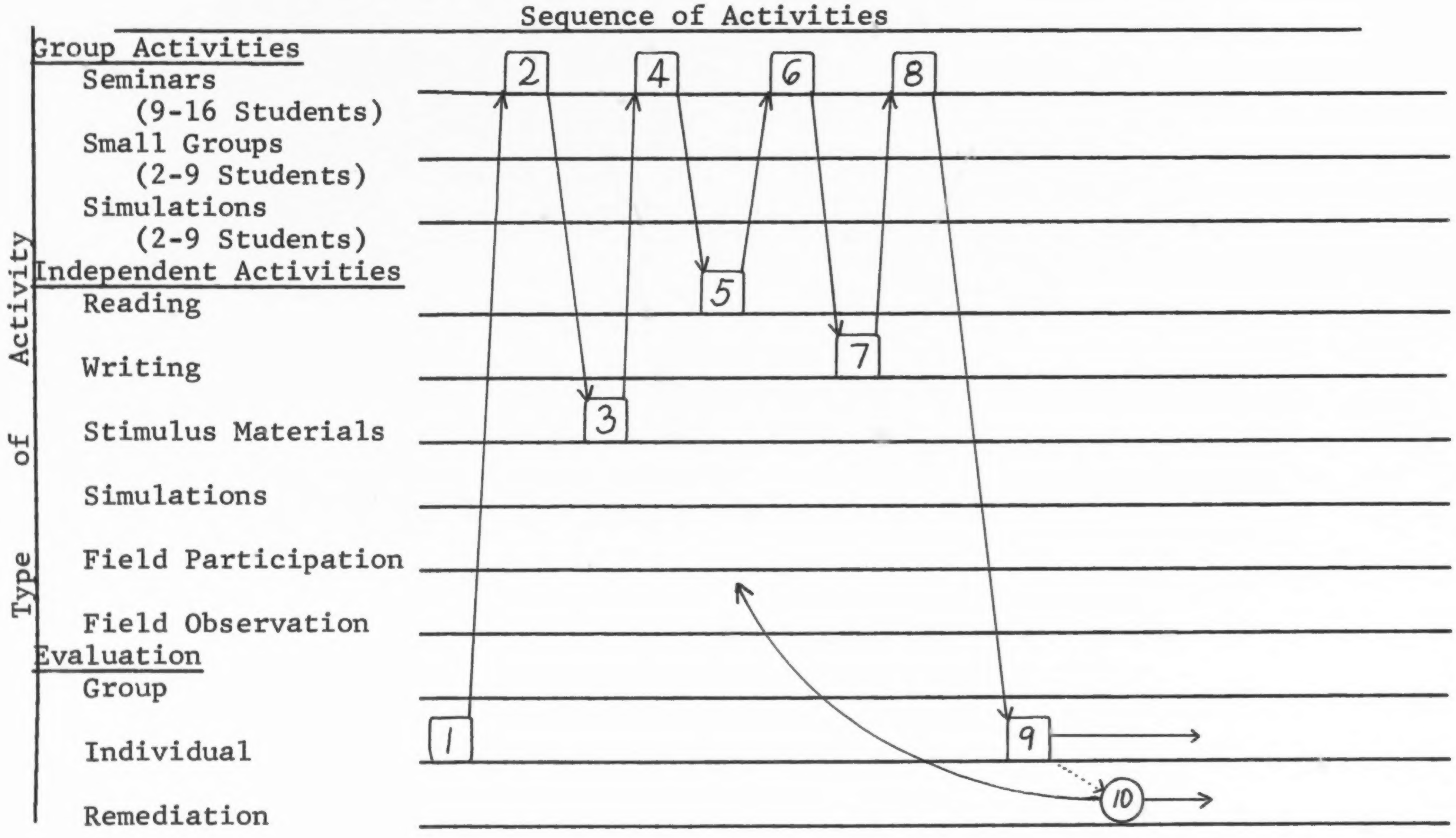
7. Application paper: Students will be asked to write a short paper dealing with the question of how a teacher can and should take into account the youth sub-culture and student sub-cultures.

8. Seminar: Purpose will be to discuss application papers and provide feedback to students.

9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-19
Figure 8.19


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
Group
Individual
Remediation
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SCF-20: Competing Educative Agencies

I. Prerequisites: SCF-15.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--24 hours.
University faculty time--8 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objectives of this module are to increase students' awareness to the facts that: (a) the school is one of the many educative agencies in American culture, and (b) that among other educative agencies are the family, the peer group, the mass media and the church, and (c) that other educative agencies sometimes support and sometimes conflict with the school as educative agency, and (d) that educational policy in the schools must, if it is to be intelligent policy, take into account the other educative agencies. The general objectives of this module should prepare the student to do the following:

A. List these other educative agencies.

B. For each of these other agencies give an example of how it may support the school or be in conflict with the school.

V. Modular Activity Flow Chart: See Figure 8.20.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

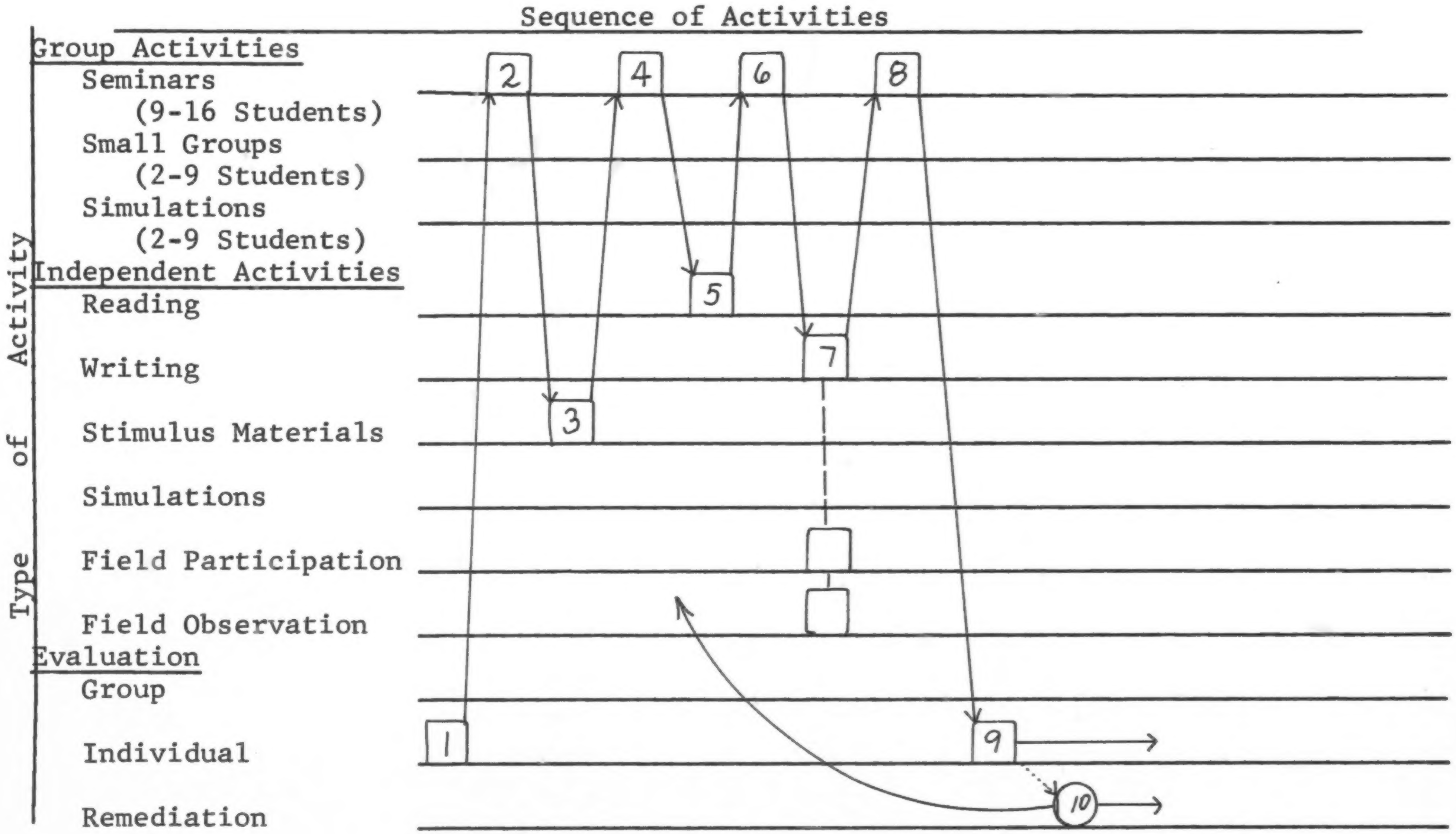
2. Orientation seminar: This will include an explanation of the objectives of the module and a description of the activities which will be included.

3. Video lecture: This will be an overview lecture on the topic of competing educative agencies.

4. Seminar: Major purpose will be to discuss the lecture and questions related to the lecture. Students will be encouraged to discuss the question of how the competition between/among agencies which educate affects schools.

5. Reading: Selected readings will be used to clarify and expand the material discussed in the lecture and seminar.
6. Seminar: Discussion of the reading will be the major purpose. Students will be asked to draw tentative generalizations based on the readings, lecture and seminar discussions.
7. Application assignment: Students will be asked to examine their own teaching situation and then write a short paper showing how their work is influenced by educative agencies other than the school.
8. Seminar: Discussion of the application papers will be the major purpose of this meeting.
9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.
10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

Modular Flow Chart SCF-20
Figure 8.20


Sequence of Activities
Type of Activity
Group Activities
Seminars (9-16 Students)
Small Groups (2-9 Students)
Simulations (2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
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Individual
Remediation
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SCF-21: Other Contemporary Socio-Educational Problems

I. Prerequisites: SCF-15.

II. Placement of Module: Resident year.

III. Estimated Time: Student time--12 hours.
University faculty time--6 hours.
Clinical Professor and Clinical Teacher time--0 hours.

IV. Operational Objectives: The major objective of this module is simply to provide an overview of other socio-educational problems which have not been explicitly studied. Students would not be expected to study these problems in depth, but they would be expected to recognize the problems as problems for education, to explain why they are problems for those making educational policy, etc. The general objectives of this module should prepare the student to do the following:

A. Given the following social problems, student would explain these problems and why they are also problems for the schools:

1. Increased leisure time
2. Increased geographic mobility
3. Bureaucratization of the American school
4. "Knowledge explosion"
5. Increased interdependency of people

B. Given the above list of problems, students could:

1. Explain how each is related to the so-called technological revolution.
2. Explain the sense in which each is a curriculum problem

V. Modular Activity Flow Chart: See Figure 8.21.

VI. Description of Instructional Activities:

1. Pre-test to determine whether the student should:

   a. Have additional instruction prior to taking this module.
   b. Study all or selected portions of this module.
   c. Proceed to the post-test or following module.

2. Orientation seminar: This will include an explanation of the objectives of the module and a description of the activities which will be included.

3. Video lecture: This will be an overview lecture on the topics listed in the "operational objectives" section above.

4. Seminar: Major purpose will be to discuss the lecture and to examine questions of how these changes affect and are affected by schools.

5. Reading: Selected readings will be used to clarify and expand the material discussed in the lecture and in the seminar sections. Among the readings which are appropriate are: T.F. Green's, Work, Leisure and the American School; Corwin's, A Sociology of Education; and Hodgkinson's, Education, Interaction and Social Change, Harrington's, The Accidental Century; Hadden, Masotti, and Larson's, Metropolis in Crisis.

6. Seminar: Major purposes would be to discuss the reading and to frame tentative generalizations on the basis of the reading and the previous discussions.

7. Application assignment: Students will be asked to write a short paper showing how one or more of these problems is affecting the operation of his classroom.

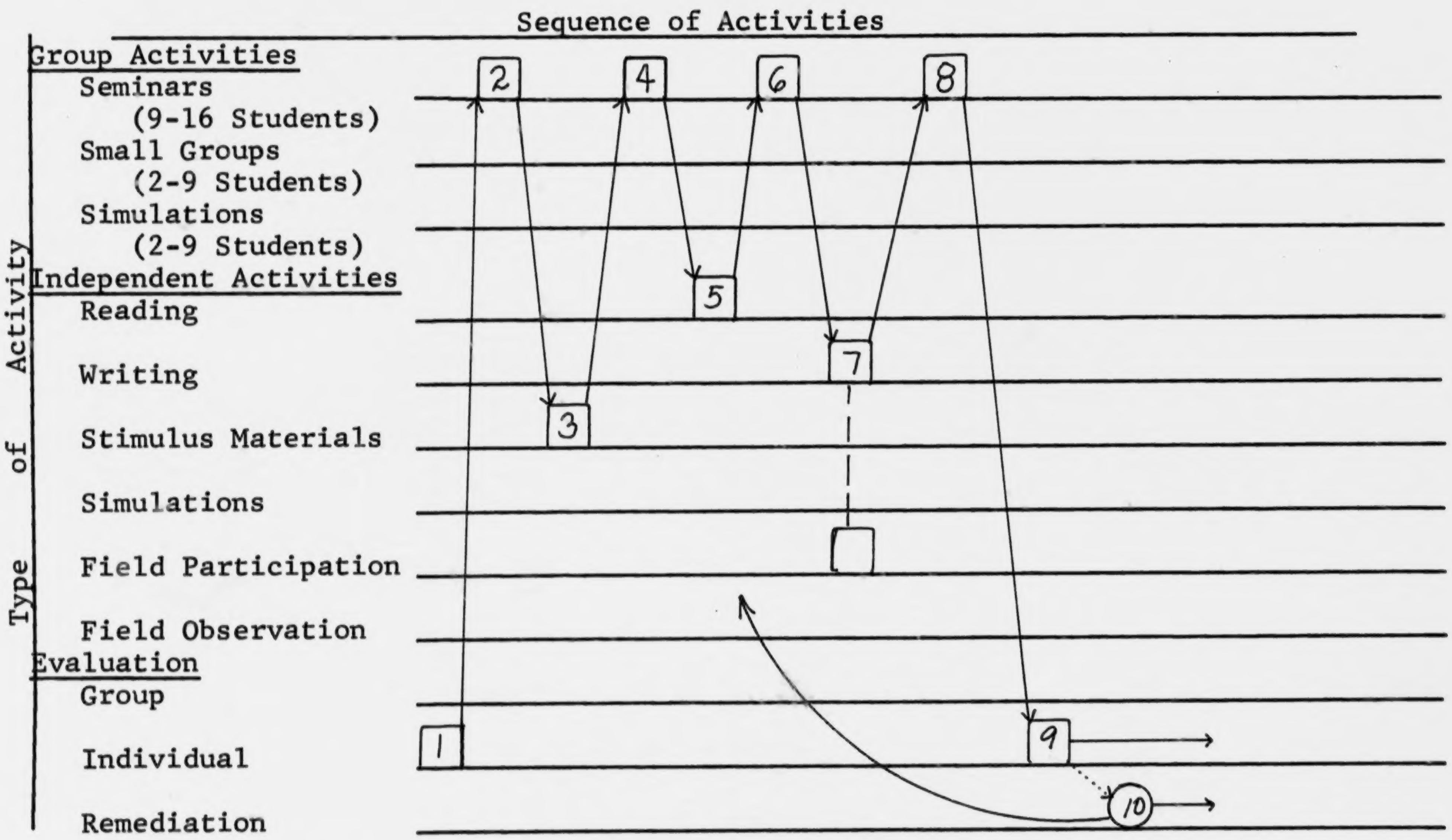
8. Seminar: Major purpose is to provide student with feedback about their papers.

9. Post-test to determine if the student should: (a) repeat certain parts of this module, or engage in other remedial work, (b) proceed on to some other module.

10. If the post-test indicates a need for the student to repeat certain aspects of the module or engage in some other remedial work, a remedial conference would be held with a professional staff member.

3

Modular Flow Chart SCF-21
Figure 8.21


Sequence of Activities
Type of Activity
Group Activities
Seminars
(9-16 Students)
Small Groups
(2-9 Students)
Simulations
(2-9 Students)
Independent Activities
Reading
Writing
Stimulus Materials
Simulations
Field Participation
Field Observation
Evaluation
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Individual
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CHAPTER 9

THE SELF-DIRECTED COMPONENT

Rationale

Introduction

This Model Program has been designed to bring new developments and practices to the field of teacher education; for example, individually prescribed instruction, sensitivity training, and an understanding and utilization of educational technology. The Model Program has also been designed to provide modules which are self-paced to accommodate individual learning rates. This component, the Self-Directed Component (SDC), and parts of the Professional Sensitivity Training Component, provide a self-directed dimension designed to balance and personalize the program, adding self-directed thrust to self-paced learning.

The essential task provided by the Self-Directed Component is for each student to be able to answer the following questions both verbally and while teaching:

1. What changes would you like to see take place in the children you have taught as a result of your planning, teaching, and relationship with the children?

2. In terms of behavior, how would you describe these changes to enable you to evaluate your resident teaching year in terms of these goals?

3. What specialized training, in addition to that provided by the prescribed modules of the program, would you need to help you accomplish your goals?

The Self-Directed Component is designed to help the student find the answers to these questions after he has carefully explored, clarified, and defined each question as it applies to his background, values, style, intellectual abilities, and other capacities.

Probably the most important help for the student is the one-to-one working relationship between himself and a counseling-advisor whom he has picked. Students are encouraged to meet with their counseling-advisors at least once every three weeks. This relationship is an enabling one, combining for the student the training and experience of a counselor with the knowledge of a generalist in the field of elementary education.

In addition to the one-to-one relationship with his counseling-advisor, each student may participate in student-controlled "enabling seminars" made up of about twelve students each. These groups meet once each week and are designed to help students discuss, integrate, and reflect on educational questions that are of genuine concern to the students. The dialogue is continued, in a broader sense, in the student-controlled weekly newsletter. Here is a forum in which student opinion and considered comment are aired. Finally, the Self-Directed Component requires of each student a "Planning and Goals Paper" which delineates his answer to the three previously posed questions. He is then required to carry out the needed training for increased specialization during the summers preceding and following his resident year. This is aided and further clarified by feedback from evaluation of his teaching and work on special projects during the resident year. During his resident year, each student's evaluation is stimulated and aided by the close working relationship of the student and his counseling-advisor and the resources of the Facilitation Center.

Primary Objectives of the Self-Directed Component

In its values and assumptions about man's biological and psychological uniqueness, the Self-Directed Component emphasizes the development of each student's professional individuality. This component should not be in a teacher education program which is consistent with the goals of a non-open society because the component implies a critical examination and re-synthesizing of the ideas and understandings that one is taught. Politically speaking, this can and should lead to an increased number of innovators in an open society;* that is, people who see the same problems from different perceptions, and who are trying to achieve solutions to the questions that they define in ways that might modify established patterns. In terms of professional education, the component attaches values to helping teachers examine and judge the adequacy of various pedagogical practices, educational theories, and assumptions on which modern practice rests, and finally it helps teachers synthesize a critically-analyzed understanding of modern practices. This understanding should be the basis for each teacher's approach to teaching. Therefore, from the beginning as a student in the training program, the teacher is encouraged to be self-directed. This can be further explained in terms of the two central aims of this component:

(1) The component encourages the student to explore for himself the values implicit in the various points of view he studies, the several value orientations of the individuals he encounters in the teacher education program and the field, and, of course, the particular point of view embodied in this component. The problem, then, is for him to set up his locus of value within

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* Definition: In an open society it is the right and obligation of the citizenry to consider and to evaluate public policy--thereby delivering to their elected leaders and representatives a binding and informed "consent" concerning the policies and aims of the leadership.

himself--What are his central values?--and then to proceed to act on this personal value orientation. It is the role of the enabling seminar, the newsletter, and the counseling-advisors to help the student sort out what he is coming to value in terms of what makes sense to him personally in light of its tested relevance to his experience and own life style. This is intended to help him develop a sense of well-criticized values in education and to act on his personal understanding so that more and more he can trust his professional intuition. Thus, the first aim of the Self-Directed Component is designed to help the student realize a deeper and more personal understanding of the various conventions, abstractions, and generalizations to which he is exposed during the teacher education program. He might, for example, profit greatly from an enabling seminar discussion concerning the extent to which a teacher is free to plan his own curriculum. What role does the teacher peer group play? Do principals only want things to run smoothly and keep the parents happy? Do teachers who are curriculum innovators always have to succeed in everything they try--or else? In this situation, the student will not only be exploring the questions from the basis of the various studies and experiences of others, but he and his fellow students will be exploring them from their own experience, with their own biases, and with their own personality styles considered. The hoped-for resultant understanding should be an integral part of this individual, ready to be relied upon in making rational professional decisions, and it should be one of the trusted perceptions on which his intuitive professional decisions are grounded.

(2) Closely allied with this first goal is the second: an involving experience in taking responsibility for one's own learning. From the student's hoped-for personal clarification and understanding of teaching, the component is designed to help the student translate these attitudes, values, and understandings into a personally felt and carefully expressed central aim having to do with the teaching of children. If the component's second aim is realized, the student will write a goal paper that will be congruent with his genuine feelings and understandings; then he should seek the necessary specialization or training required to achieve his goals; and finally, he will assess his teaching in terms of the central aim spelled out in behavioral terms in the goal paper.

Justification of the Self-Directed Component in an Elementary Teacher Preparation Program

1. ANY TEACHER PREPARATION PROGRAM FOR AMERICAN PUBLIC SCHOOLS SHOULD ACCORD ITS STUDENTS A FULL MEASURE OF DIGNITY, INTEGRITY, AND AUTONOMY.

Assuming that the United States stands for granting to each person a full measure of dignity, integrity, and autonomy, then its teacher preparation schools need to adhere to this canon proudly, and if necessary, jealously. With the Self-Directed Component, the model program curriculum is balanced. Where most of the curriculum is of a pre-set nature, the Self-Directed Component is designed to assist and enable students to explore for themselves and to set practical goals in light of their own unique biological and psychological backgrounds and current understandings. Then they are encouraged to carry out their individual goal setting, and finally, assess the results with respect to children of their self-directed learning. In addition, students have the unfettered right to express themselves via the weekly newsletter. Then, too, students are given control of their enabling seminar leadership and whether they wish to attend.

2. FUTURE TEACHERS NEED TO EXPLORE SERIOUSLY THE PROBLEMS AND REWARDS OF TAKING RESPONSIBILITY FOR ONE'S OWN LEARNING.

The Self-Directed Component is designed to enable students to take responsibility for a sizable part of their own learning. It includes eighteen units of self-planned graduate work as well as the time and effort spent in exploring and planning via the enabling seminars, bimonthly log sheets, and other vehicles designed to help the student explore, clarify, and set his own goals, carry them out, and assess his goals in terms of the extent to which he is meeting them.

It is assumed that students have had inadequate past experience with taking serious responsibility for their own learning. We feel that this is a valid assumption based on our experience of working with teacher education students. These students, in almost every case, have not had a single substantial experience where they carefully clarified and explored a performance goal for themselves, defined it operationally, and then planned a curriculum to sharpen their strengths and remedy their weaknesses in light of their goal, and finally, tried it out and assessed their results in terms of their operationally defined objectives.

We argue that if students in elementary teacher education do not have a set of such experiences, it is naive to expect many of them to help children in their classes to take responsibility for their own learning. We think children should be having these experiences in their schooling.

To help students learn to take responsibility for their own learning, the overall structure of the Self-Directed Component is set up so that the students will experience the various facets of self-directed problem solving. The model is essentially the one explained by Dewey (35) and elaborated on by others (23), (68), (70), and (106). First, the student is encouraged to explore, clarify, and define the problem for himself--to ask the relevant questions. This is why the only assignment connected with the enabling seminars (or for individuals going-it-alone) is that students work toward a clear statement of the essential differences they hope to bring about in children who go through their classes. This is one reason why students are asked to write a preliminary or "baseline goal paper"--to lay open, at the beginning of the Self-Directed Component, their understandings and feelings. Thus, we hope to see each student's initial status in terms of the extent of his lack of pointed understanding or perhaps his lack of a clear purpose in teaching. From this point, the student is encouraged to become more specific by toying with his ideas, exploration in the field, dialogue with other students, and questions raised by his counseling-advisor. From early in the senior year, students are expected to focus increasingly on their central aim for teaching (or the aim as they see it) and to again explore, clarify, and develop the deepest meaning of the more pointed area. Then, in the final goal and planning paper, students are asked to define their aims behaviorally, in terms of changes in children. Thus, we are now at Dewey's hypothesis-making state ("If I do this, the children should be doing thus-and-so."). In the process of setting behaviorally defined goals, the students are encouraged to examine critically their hypothesis in light of its probable consequences (the next problem solving step), and finally, they test their hypothesis with the children. Thus, their self-directed experience tentatively ends with their problem solving. In a very real sense they have merely narrowed and clarified further to the point where they are really beginning to ask precisely the right questions--presumably the questions they weren't able to ask and understand in the first place, and now make the course ahead relatively clear and orderly. In Dewey's words:

> There is no better way to decide whether genuine inference has taken place than to ask whether it terminated in the substitution of a clear, orderly, and satisfactory situation for a perplexed, confused, and discordant one...Vital inference always leaves one who thinks with a world that is experienced as different in some respect, for some object in it has gained clarity and orderly arrangement. (35:p.101)

3. STUDENTS NEED ENABLING STRUCTURES AND COUNSELING SUPPORT TO DO THE OFTEN TIMES DIFFICULT (AND IN MANY CASES NOVEL) JOB OF MODIFYING THEIR IDEAS, VALUES, AND RESULTANT BEHAVIOR IN LIGHT OF NEW CONCEPTS, EXPERIENCES, AND/OR EVIDENCE.

Considerable clinical experience, research, and theory (71) (87) supports the notion that most people need the help and responsiveness of others (both individuals and groups) whom they value in order to clarify, explore and "try out" new ideas, values and resultant behaviors. This "enabling" seems to help provide the needed security and acceptance during the period when the individual is letting loose of secure positions and toying with the new. For many people, considerable self-esteem, security, and identity are tied to the ideas or behaviors that they consider changing.

The Self-Directed Component is designed with this need in mind. First, each student is encouraged to have extensive non-threatening talks with his counseling-advisor, at least once a month. Counseling-advisors are to be selected and/or trained according to the model that research has provided for the supportive, accepting, clarifying counselor. Truax (138) and Rogers (105) offer us a model of counselor effectiveness that has been tested in research and practice. According to this research and practice, the recognizable counselor attributes that are crucial in establishing the "helping relationship" are: (a) accurate, empathetic understanding of the student, (b) uncontrolled positive warmth for the student, and (c) the counselor's self-congruence or genuineness. (138). Thus, we are saying that we have available criteria which should be instrumental in providing the kind of counseling-advisors in the Self-Directed Component that will help students to change.

Finally, the Self-Directed Component provides the enabling seminar for those students who would be supported and facilitated in personal change by the interaction with an open and valued peer group. Here, again, we have tested experience and significant research to guide us, (15), (25), and (26). Cantor (25), for example, offers us detailed transcripts of the day-to-day discussions in the type of enabling seminars that are proposed for this component. These should prove valuable for the training of leaders for enabling seminars and perhaps in introducing the idea to students.

4. THE SELF-DIRECTED COMPONENT IS SUPPORTED BY RESEARCH AND THEORY FROM THIRD FORCE PSYCHOLOGY.

For the past twenty years in American psychology a new synthesis of psychological insight and research has grown away from traditional Freudianism and S-R associationism. This third force is not so concerned with the subconscious or the outside stimulus to a person's action, but is more concerned with the immediate field of a person's perceptions, his biases, self-concept, feelings, faith, hates, values, beliefs, doubts, attitudes, and convictions. Therefore, in learning with any degree of complexity, primary attention is placed on the meaning that results as a vector of all the factors that comprise an individual's life space at a particular moment in time. Thus, meaning lies inside of people rather than on the page of a textbook or in the sequence of a demonstration. This meaning cannot be directly manipulated and controlled by teachers. Control is in the hands of the learner, if it is in anyone's hands.

It follows from this perspective that teaching, such as in teacher education programs, should emphasize opportunities for students to integrate their feelings and emotional selves with the intellectual and rational approach to learning that necessarily is a large part of the learning material, such as books, which rely on high order symbolic abstraction as a medium for idea transmission. Students need to approach learning with a possibility of choices before them, choices that are important to them for personal reasons, choices which allow each student to relate his learning to the way that he has structured his life at that particular point in time.

According to most spokesmen for third force psychology, however, the traditional forms of stimulus-response associationism learning are not to be thrown out. These are to be seen as only one form of learning, probably well-suited for that learning which is of a lower order of complexity. However, most of the teacher education curriculum is of a high order of complexity. Learning concepts of child development, theories, ideas about society and psychology, and choosing between controversial methods of teaching are certainly not of a low-complexity order of learning. These areas are packed with feeling, biases, conflicting beliefs and divergent experiences for teacher education students. Therefore, according to third force psychology, a teacher education program needs to be structured so that students have ample opportunity for toying with, criticizing, and discussing ideas in their own terms rather than in the terms presented by a particular author.(26) Because emotional and attendant securities will be involved, these opportunities for exploration and clarification need to be open so that the student might or might not involve himself; they need to be accepting of individual student differences; they need to be handled by participants who have had training and/or backgrounds which allow them to interact with others in an honest fashion; and finally, these opportunities have to allow students to make mistakes, to "take back" what they have said, to fail at times in search for deeper meaning or a better way.

It should be plain to the reader that the enabling seminars and the counseling-advisors in the Self-Directed Component have been designed to facilitate this personal integration by each student. As much as possible, the enabling seminars, the counseling-advisement, and the newsletter have been kept free from faculty authority to permit students to depart from their usual orientation characterized by "What specifically does the professor want back?" inquiry that seems to go on continually at colleges and universities. The Component is designed to be free from the "right" answers approach, and loaded with the stimulation and opportunity for students to come up with their own answers.

AN OPERATIONAL DESCRIPTION OF THE SELF-DIRECTED COMPONENT

Students will enter the model program at the start of the junior year after completing the required liberal arts prerequisites as freshmen and sophomores. They will follow a pre-set sequence of study through modules (described in earlier chapters), many of which will be self-directed and will include reading and discussion of professional literature, exercises, tapes, films, and programmed instruction.

Balancing this pre-set though largely self-paced instruction will be the more personally-oriented Professional Sensitivity Training Component and Self-Directed Component. (Only the part of the Professional Sensitivity Training Component that pertains to the Self-Directed Component will be described here.)

Sensitivity Training

As was discussed in chapter seven, at the beginning of the junior year students will be grouped in sensitivity training T-groups of about twelve students each. In these groups they will participate in sensitivity training designed to help them become increasingly aware interpersonally in group situations and to communicate more honestly and openly with a minimum of roadblocks or other unnecessary filtering of communication. This training should also help students become sensitive to the dynamics of a group in operation; thus aiding them in recognizing some of the causes of group malfunction. As a result of sensitivity training, students should be better able to assess their own personal strengths and weaknesses and interests, and gain some of the necessary skills and understandings for taking responsibility for their own learning.

Task Changes: Sensitivity to Self-Direction

Taking responsibility for one's own learning is the major task of the Self-Directed Component which begins upon completion of Module PST-1. It is the student's responsibility to come to the deepest possible understanding of teaching as it applies to his strengths and weaknesses and his interests and ideals. The process is one of integration and personal synthesis plus the student's actual planning for implementation of personal aims worked out in a program leading to a specialization and implemented during the summer before and after the resident year of partnership teaching. During the resident year, the emphasis shifts to self-assessment of his teaching in terms of his aims.

Baseline Goal Paper

Following the completion of the first module of the Professional Sensitivity Training Component, students will choose a counseling-advisor and be asked to write a baseline goal paper. In the baseline goal paper, the student should write his present thoughts about why he wants to be an elementary teacher, how he feels about teaching, and what special effect or effects he would like to have on the children who go through his classes--his central concern as a teacher--and why. The first draft of this paper is to be taken to the student's counseling-advisor. The paper serves partly as a way for the counseling-advisor to get to know the student, and serves as an indication of the beginning point for the student--where he is with reference to his ideas about teaching and reasons for entering the teaching profession.

Counseling-Advisor

It is the counseling-advisor's job during the first conference (and perhaps other early-in-the-semester conferences) to help the student express clearly and explicitly his ideas at the point of the student's deepest understanding. Thus, the counseling-advisor will ask the student to expand on such terms as "critical thinking" and cliches such as "an education to instill patriotism." The student's final draft of the baseline goal paper should contain such unsupported abstract statements only if they represent the deepest level of the student's thinking and perceptions.

Time for Integration

The counseling-advisor then files the paper, which will not be used again until the end of the senior year and then only to provide a comparison with the final goal and planning paper. During the intervening time (from mid-year in the junior year to near the end of the senior year), the student will be encouraged to take time for personal exploration, analysis, clarification and synthesis pertaining to teaching, children, schooling, learning, and other pertinent concerns.

Enabling Seminar and Faculty Facilitators

The vehicle that is designed to assist most students in their self-directed study and reflection is the enabling seminar. In most cases, upon completion of Module PST-1, students will probably opt to stay with their sensitivity training groups and simply begin work as an enabling seminar. Thus, many of the sensitivity training groups which will have become enabling seminars will continue after the completion of Module PST-1.*

Enabling seminars will typically meet once each week for two hours. In each seminar the student members will decide on their own leader. Faculty facilitators will be available to lead groups if the students in certain seminars wish to be led by a trained leader. This will be arranged after students have had a chance to choose between several possible faculty facilitators who are available. Faculty facilitators need not be from the Education faculty, however; for example, students might choose a faculty facilitator who is director of the Urban League, or a child psychiatrist, or a professor in the political science department. The faculty facilitator should be a person who can clarify, introduce new ideas, raise questions, and throw out challenges. He should be non-directive if that is what the group wants. He must realize that the students are to decide how the enabling seminar is to progress and what it is to become. The students in some enabling seminars, however, might choose to provide a student leader who is not a member of their seminar or leaders drawn from the seminar itself.

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* From time to time, additional individuals will be added to an ongoing enabling seminar, but only if: (a) the student has been trained in group processes and sensitivity, and (b) he and the group agree that this is the group for him.

If a student finds himself in a seminar which is disappointing to him --for example, if it develops in a direction not in his area of interest, or if his interests change--he might drop out and enter another, or he might choose to go-it-alone under the direction of his counseling-advisor.

Newsletter

Communication between all students (both in seminars and going-it-alone) is intended to be facilitated by a weekly newsletter which will be published by students. The newsletter will provide a place for exploration of viewpoints, feature articles, comment, and dissent. The newsletter will have a student editorial board responsible for what goes into the paper. In addition to features, letters to the editor, news of field experience and other student activities, the newsletter will publish reports and comments from the enabling seminars. Each enabling seminar will be responsible for one major newsletter feature periodically (perhaps each semester), contributing well-thought-out comment around some issue which the group decides is pertinent and significant to professional education. This could be a major assignment or project for a seminar.*

There should be no faculty veto of the newsletter. It could become a source of student power, a means of open communication and participation for the student, and a chance to affect the teacher education process while he is in it. The newsletter hopefully will record stimulating dialogue between the seminars, thus encouraging students to make choices, to discriminate and explore issues, and to clarify in their own minds what the various controversies in education mean to them personally.

Advising

During the time that students are participating in enabling seminars (or going-it-alone with independent study), each is to keep in touch with his chosen counseling-advisor. Students will be encouraged to sit down and talk with counseling-advisors at least once every three weeks and turn in a diary-type log to the counseling-advisor about every two weeks. It is the counseling-advisor's role to help the student continually refine and personally synthesize, looking ahead to the final goal and planning paper which he will write toward the end of his senior year. Counseling-advisors can also recommend that a student's program be altered, thus tailoring the program in some cases.

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* The students who are going-it-alone would also be asked to make periodic contributions to the newsletter.

In many students' cases, the program will not have to be altered, even though the student will need to be helped in using the resources of the program wisely, in terms of his developing interests and curiosities. For example, in most of the other components there are empty modules which symbolize invitations for the student to call upon the professional staff to plan independent study projects designed to answer specific needs of the student and to help the student explore a particular focus of study (or specialization) related to his central aims in teaching.

Final Goal and Planning Paper

From about the mid-point of the first senior semester, counseling-advisors will press students to consider to what extent they have made the necessary exploration and study to decide about their central aims for teaching, and if they wish to pursue a particular specialty (e.g., remedial reading or individually prescribed instruction). This increasing focus should help the student write his first draft of the final goal and planning paper which will be due about two weeks before the end of the senior year. By the time the student writes his final draft, both he and his advisor would agree that the teaching goals and plan are:

(1) implementable by the student,

(2) capable of being assessed (and therefore expressed in behavioral or operational terms) by the student, and

(3) supportable by the resources of the program.

Advising During the Resident Year

During the resident year, the counseling-advisor's role changes. He is still working with the student with whom he began (unless a counseling-advisor was changed), but during the resident year his role is to help the student with his assessment of his teaching according to the goals expressed in the final goal and planning paper. Of course, the counseling-advisor continues, as before, in the role of clarifier--someone with whom the student can talk.

Facilitation Center

The counseling-advisement, the newsletter, the functioning of the enabling seminars will be coordinated and facilitated by a Facilitation Center. The director of the Facilitation Center will have responsibility for the Center's functions and resources, for coordinating and supporting the enabling seminars, and providing leadership to the counseling-advisors.

The Facilitation Center's resources will include (in addition to the counseling-advisors), T-group trainers, a curriculum library, occupational specialty information, and stimulus media.* It will produce the newsletter and offer student audio-visual supplies, curriculum materials, and duplication services needed for their work in the program. Another function of the Facilitation Center will be to coordinate periodic meetings of the counseling-advisors who will prepare reports to the program faculty and students summarizing feedback and general comment the counseling-advisors receive in their one-to-one work with students. One suggestion for doing this would be through a newsletter. This data will be used in the ongoing evaluation of the program.

As a part of the Facilitation Center library, a large quantity of audio and video tapes will be housed. These will depict various classroom and field sequences. Most important, however, will be tapes, books, and articles by various outstanding professors at work in colleges and universities in this country and abroad. Students who are in the process of choosing the best courses to take in order to implement summer plans for study will be able to see and hear or read material by the professors whom they are considering before deciding which ones to study with.

The Facilitation Center's field consultant will be responsible for obtaining these tapes and publications from outstanding individuals. In addition, the field consultant will act as the contact man for students who would profit from work-study experiences during one or both of their graduate summers. Thus, he might arrange for a particular student to serve as a stand-in and prompter for a reputable summer stock company if such an activity would be an integral part of the student's plans for developing his specialization.

BASIC UNITS AND PERSONNEL OF THE SELF-DIRECTED COMPONENT

The Enabling Seminar

The purpose of the enabling seminar is primarily to help the student in discovering personal meaning. Combs proposes such a seminar with the following description of its aim:

> The purpose of the seminar would be to provide a group small enough for students to have adequate opportunities for discussion and stable enough so that there would be ample opportunities for them to get to know each other and to be known by their seminar (leaders). Every attempt would be made to create an atmosphere of interest and concern for students and continuous involvement in professional matters. Here the student would be given opportunities to discuss, experiment, explore ideas, techniques, concepts, and the like.....(26: 119)

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* Stimulus media will consist of materials such as the open-end films designed to provoke and channel discussion of a group and its involvement.

The seminar size should be large enough to maintain discussion from a variety of viewpoints and experience, but small enough so that the members would know each other. The maximum size should be about fifteen students. The students should have had prerequisite training in T-groups or other background which equipped them to take responsibility for the management of their own group, both from the viewpoint of being sensitive to the dynamics of group functioning as well as being able and willing to communicate openly and honestly.

At the conclusion of sensitivity training Module PST-1, the groups would be formed. The Director of the Facilitation Center would meet with the students to explain the purpose of the enabling seminars and how this tied in with the role of the counseling-advisor, the newsletter, and the Facilitation Center. The student would then choose his counseling-advisor, and begin discussions relating to the baseline goal paper. Therefore, the need of the seminar in assisting the student in thinking through his central aims would presumably have been established for each student. It is assumed that most of the original T-groups of the Professional Sensitivity Training Component would simply continue as enabling seminars. Those students who did not wish to continue on in their T-group would be consulted as to their reactions and ideas along with their desires for being in an enabling seminar. Additional seminars would then be composed of students according to the decision of the director after he (or his representative) had a chance to discuss the question with the student individually. Those students who chose to go-it-alone would be under the supervision of a counseling-advisor who, in their cases, would work out appropriate experiences to help the student think through his aims as a teacher. This might be a series of papers; it might be a combination of experiences and reading which the counseling-advisor and the student had worked out; it might be a job with a particular agency where the student did case-work.

The director or his representative would meet with each enabling seminar to help the group get started. The initial task for the group would be to decide on whether it wanted a faculty facilitator, and, if so, who he might be and what his role should be. This should be done by the students without the director or any persons of authority present unless requested by the students. When the students had completed this deliberation, the director or his representative would meet with the enabling seminar to help implement their ideas. At this point the director would decide with each group how it was to provide him with feedback--the students' reactions to what was going on in the group. This student evaluation should be frequent (every two weeks would suffice) and under conditions agreed upon by the group members meeting with the director. The director would explain that he has the responsibility for seeing to it that the enabling seminars were in fact seen as enabling by the members. Therefore, this feedback is essential, and is a responsibility of the group. He would also explain that if he felt that the group appeared not to be functional he would not move in any way without first discussing the situation with the group members. He would explain, in addition, that the Facilitation Center had on its staff T-group trainers who were available to enabling seminars to help groups resolve their own problems should they arise.

Early in the life of the enabling seminar, student staff members of the newsletter would meet with each enabling seminar, explaining the support and contribution needed by the newsletter staff if the newsletter were to serve its purpose. This probably would be in the form of a request to each enabling seminar that it take responsibility for one feature article during the semester, dealing with a professional education topic of concern to all the members.

Many of the enabling seminars would probably structure their topics in terms of their need to contribute feature articles to the newsletter. Thus "getting started" would not present much of a problem. However, deciding on a theme agreeable to all might present a problem to some groups. For example, in one group one student might be particularly concerned with large school districts which appear to be bastions of conservatism, finding it difficult to change things like established teaching methods, grouping, and hiring practices that do not appear to be solving the district's problems. Another student might have an intense interest in the problem of school discipline policy about which teachers, administrators, and spokesmen for Negro groups in the city were arguing. Yet another student might feel strongly that the group should explore the question, "To what extent do elementary school principals want to preserve a smooth school at all costs?" In addition, other students might have a vital interest in having the group survey elementary school readers and social studies books to see if, in fact, they were as bland, as non-relevant, as valuing of white Anglo-Saxon viewpoints, and as politically conservative as some writers today would have people believe.

How to resolve such a problem in starting the enabling seminar? One way would be for the leader to ask each student to present at least a twenty minute exposition of the issues and evidence that were the substance of his question. The next one or two enabling seminar meetings might be taken up in a series of these preliminary discussions, perhaps with resource people brought in by each interested student. Out of this could develop a theme broad enough to encompass all students' genuine and serious interests, or the leader might appoint an agenda committee to develop the program each week, based on the several suggestions of the group which, after an initial discussion, seemed substantial and interesting enough for further discussion.

What are the characteristics of a good operating enabling seminar? The group work literature offers much insight. (136) For example, Trow, Morse, and Jenkins (15) list the following propositions drawn from research in group dynamics which should be of assistance in understanding group operations:

1. The attitudes of individuals have their anchorages in groups. It may be easier to change the attitudes of individuals in

the group by changing the group climate than by attempting to address intervention directly to the individual.

2. All groups demand a certain degree of conformity from members. The closer and more cohesive the group, the more power it has over the behavior of members.

3. When decisions are made by a group, the commitment of members is much better than when the decision is arbitrarily imposed from outside the group.

4. Highly cohesive groups can overcome greater difficulties and frustrations in pursuit of group goals than can less-cohesive groups.

5. Group cohesiveness is largely a function of the degree to which members feel the group is meeting their needs.

6. People tend to be more effective learners when they are acting as group members in a training situation than if they are acting as individuals in an audience situation.

7. The amount and nature of verbal interaction among members is a function of group factors. For example, in cohesive groups, views, opinions, and behaviors that are quite deviant from the concensus of the group are likely to be ignored, rejected, or punished.

8. Cooperation and communication is greatest in groups where goals are mutually defined, accepted, and understood.

9. The group climate or style of group life can have an important impact on the personalities of the members. The behavior of members may differ greatly from one group climate to another. The individual who seems hostile, aggressive, or disruptive in one group situation may behave very differently in another situation where the group climate is different.

Blocher (15) describes several models of different types of groups. The model which best fits the enabling seminar is called the "Common Problems" model. As a basic pre-condition, the group members need to focus on a problem that they all feel is real to them. The Model Program sets this problem by the necessity of exploring the meaning of teaching and learning so that each person can take increasing responsibility for his own learning with the immediate task being to plan this learning in the goal and planning paper. Other, more specific tasks stemming from this overall problem orientation should come from the discussion of group members. Once a group has centered around cohesive concern regarding the common problem area, Blocher lists the following characteristics:

1. Mutual support. A cohesive group can support members who find the exploration of a problem area painful and threatening. Group members who may be experiencing similar feelings are often more sensitive to each others' needs than the most skillful counselor. Often, the most terrifying part of working through developmental problems is the feeling of isolation and loneliness that comes from the delusion that no one else has ever experienced the same difficulties. Common problems groups break down these feelings of isolation and replace them with feelings of belonging and mutual security.

2. Empathy and insight. In cohesive groups organized around common problems, members are able to have considerable insight and empathy for each other. They can often create a more empathic climate and show greater insight for each other than can even a skillful counselor who has a different set of experiences to draw upon for these factors.

3. Focus and direction. The common problems group can quickly establish focus and direction for the counseling process. The distribution of responsibility is often such that real concerns can be discussed and real movement can occur readily more than when responsibility is heavily on the counselor.

Cantor (25) provides us with anecdotal data illustrating one approach to the enabling seminar idea. In this case, Cantor wrote a book containing printed transcripts of selected tapes from the enabling seminar which he led for one semester. Cantor's work might be read by all concerned with well-functioning enabling seminars. There are, however, three qualifications which need to be understood by the reader. The first qualification which should be kept in mind is that Cantor's students were practicing student teachers or teachers. This means that much of the immediate stimulation was provided by the day-to-day jobs of the teachers. If the Model Program, with its live and mediated field experiences, does not provide sufficient stimulation it may be necessary to arrange for field experiences, stimulus films, or other means of bringing the group to the point of involved discussions. The second qualification is that Cantor's students did not necessarily have training in group dynamics as we are assuming for our students. This means that what Cantor's students did, our students probably will do with much less reliance upon the leader. The third qualification is that Cantor's students did not initially feel freedom from authority as, hopefully, the students taught in this Model Program will.

With these qualifications in mind the reader is invited to read the following protocal drawn from Cantor's book (25), and then to consult this valuable resource for more complete illustrations of an enabling seminar in operation.

In this meeting, the students are in the middle of discussing the perennial problem of discipline. (The instructor is Cantor):

STANLEY: There are centainly times in a class when you have to control the group.

MURIEL: Well, that would depend upon the size of the class and the situation.

JERRY: Well, that's precisely the problem. You can't lay down a rule about it. You have to feel guilty, fight against the fact that your authority is being questioned, sweat it through, keeping in mind what's good for the child, and decide when and where to take hold. No one can teach you that.

PHILIP: If teachers were able to show the pupils some of their own mistakes, that would increase the respect of the children for the teacher and would encourage the children to admit their mistakes and not be defensive. If the teacher doesn't stand up there as a paragon of virtue, the pupils are more apt to admit misconduct and to control themselves. They won't fight authority in the way kids do.

STELLA: Well, there are some children who talk all the time, and there's nothing I can do about it. I talk to the parents, and they're not effective. In the halls and stairways the children are supposed to be quiet, but they run around like wild Indians. The kids just yack, yack, yack all day long. Now I've got to keep order. (Silence.)

INSTRUCTOR: I think comments might be helpful. (The instructor deliberately refrains from any interpretation at this point. He simply accepts Stella's difference and invites other points of view.)

GREGORY: I was struck by Stella's description of the children's behavior. Apparently it wasn't the behavior so much as the disturbance it set up in Stella.

STELLA: If I didn't take hold, there would be pandemonium in that classroom. I've got to have a chance to do some talking, too. In history and social studies, things always have to be explained, and if the kids are talking all the time I simply can't explain them. I don't want anyone out of their seats. If that isn't checked, I cannot get any work done.

INSTRUCTOR: Stella, were you condemning the children when you said "Yack, yack, yack"? (Here is an instance where the instructor was dead wrong in his timing. He thought he might, at this point, help Stella to recognize that her own need to control was getting in her way. Stella ignored the remark and continued with what she felt.)

STELLA: Well, I don't know, but that's what they were doing. Children can be quiet and they shouldn't be talking all the time. The kids are simply getting on my nerves, and I can't take it much longer.

HILDA: I, too, came home tired tonight, and I had met some of these problems during the day. In my own case I was disturbed because of my own incapacities to know what to do. I didn't feel the children were to blame. I think the problem is mine, to discover some way of meeting this. I think the problem with me is a personal one.

STELLA: I haven't got any personal problems.

GREGORY: I don't understand, Stella, how any of us can divorce one aspect of our problems from those which arise in the classroom.

STELLA: In our school there are certain things we have to do to control our children. Our children are supposed to stay in their rooms five hours a day. To let them run around and be happy is one thing, but the situation must be under control, since they do have to be in the room. Our orders are to keep them under control, and the orders must be obeyed.

CORA: I'm in a school where certain conditions are imposed upon us. But aren't there different ways of carrying out those conditions, where a teacher can work with the children instead of against them? I have found that children generally understand the need for rules. That is, if they are given a chance to discuss the rules and to understand why the rules are made, by and large, they are cooperative.

STELLA: You don't teach in W________, I guess, do you? Well, W______ School children are a different type than out of W_______.

HARRY: I think children, in and out of W______, are basically the same. I know Stella's problem, but I deal with it a bit differently. I try leaving the children on their own. Now the principal didn't think that was going to be wise. Sometimes the results haven't been too happy, but, on the whole, there's no question that our discipline is much better because the children have assumed more responsibility for their own conduct.

STELLA: I leave them on their own, too, sometimes--that is, when I have to leave the rest of the class to go down and get my pay check.

HARRY: Suppose, Stella, you were the child, and you were constantly told to keep quiet. How would you feel?

STELLA: Well, I think the children want the teacher to be watching them. They want someone to control them. You ask me how I would feel if I were the child. I know how I would feel--I want someone to control me. I remember when I was a child, and I was a very good child, I didn't interrupt. I *never* interrupted a teacher. I never talked back to a teacher. I always got A's in conduct.

HARRY: Maybe that's precisely where the problem lies?

STELLA: I used to be the monitor for the teacher; I'd go for her lunch; in fact, I was the teacher's pet. Now I find myself in a situation as an adult where the children aren't that way. They're wild.

HARRY: You say, Stella, you got A's in conduct; you were a good child. Well, maybe that's why you expect so much from these children?

STELLA: Why shouldn't they be good children?

HARRY: Well, perhaps they need more approval and love from you?

STELLA: Oh, bosh, they have enough love in their homes.

HARRY: What is a good child?

STELLA: A good child is one who doesn't irritate you.

CORA: Your conception of a good child is altogether different from my conception.

STELLA: You certainly can't be irritated five hours continuously all day long and call a child a good child.

Additional references and an introduction to the general subject of group dynamics are found in Blocher (15).

Facilitation Center

The Facilitation Center is in a real sense a student support system--one of two support systems in the model program.

From the start of the second semester of the junior year and continuing through the graduate year, the student will have available to him the center's resources, including administration staff, counseling personnel, information and materials on curriculum and occupational specialities, a production and duplication service maintained specifically for students, stimulus media such as open-end films designed to provide involvement and elicit discussion by the viewers, and channels for feedback to and communication with the Facilitation Center, faculty, and other students. The director will be responsible for implementing changes which are needed and feasible.

Facilitation Center personnel will include a director, responsible for the functioning of the center; counseling-advisors who will confer with and assist students on an individual basis while they are in the program; faculty facilitators to conduct enabling seminars; a field consultant to provide specialized training information and make arrangements for summer training; a liaison man to establish and maintain communications between the center and each enabling seminar; T-group trainers who, after assisting with sensitivity training sessions during the first junior semester, will be available to the center as troubleshooters for enabling seminars or in roles such as that of counseling-advisor, faculty facilitator, liaison man, field experience consultant, curriculum librarian; a librarian or specialist responsible for the occupational specialties information and stimulus media; a supervisor of the production and duplication service; an abstractor-recorder to maintain student records and diary-logs in an up-to-date, readily-accessible form for the use of the counseling-advisors; and a computer programmer if such services are required.

The Facilitation Center will house and provide services for the student newsletter.

Additional information on the roles and functions of the center personnel and services follow.

Facilitation Center Director

The director of the Facilitation Center will be responsible for:

1. Orientation, training, activities, performance, and evaluation of the center's staff and personnel.

2. Coordination and support of the enabling seminars.

    a. Arranging for transition between sensitivity training and seminars.

    b. Making appropriate arrangements for go-it-alone students (those who do not wish to participate in seminars).

    c. Facilities.

    d. Setting purpose with participants.

    e. Helping participants get under way.

        1. Discussing questions of providing faculty facilitators.
        2. Providing access (for students) to faculty facilitator candidates.
        3. Explaining Facilitation Center and making access to the director or his representative

        possible to students in and out of enabling seminars.

    4. Arranging with liaison man to establish and maintain channels for systems of feedback to keep director informed of seminars' functioning or non-functioning.

    5. Insuring that students set up operating structures for each seminar and inform director or his representative.

3. Providing leadership to the faculty facilitators and coordinating the counseling-advisors' periodic meetings for the purpose of insuring feedback to the director of the center on their work with students, and also information to the Model Program staff.

4. Providing direction and leadership to the staff in charge of the various functions of the center, e.g., the curriculum librarian, the vocational specialties resources librarian, the production center supervisor.

5. Insuring the design and operation of a well-defined system of continuing analysis and review of center activities (the student support system) and materials in the center; continuous documentation and periodic reporting by the staff to provide feedback and information for the director's reports, evaluation and changes in the center's operation.

6. Initiating and incorporating needed changes as indicated by feedback and new ideas.

7. Working directly with selected enabling seminars as their liaison man. In addition he will be the counseling-advisor for selected students. This involvement is intended to maintain his reality orientation.

8. Making appropriate and required reports on the center's activities.

9. Making recommendations to the director of the Model Program concerning the center's personnel requirements.

10. Arranging for and providing the physical and material assets of the center.

The Counseling Advisor

The advisor must know all aspects of the program and understand its goals. A full-time counseling-advisor should handle at least four 45-60 minute conferences per day or 60-70 per month. (We assume 30 minutes preparation and write-up for each conference). A full-time counseling-advisor would be responsible for: 60-70 students, including conferences and reading each diary-log twice per month; resident year conferencing which probably would be in the field and would include classroom observation; meeting with other counseling-advisors and staff; and reporting to the director of the Facilitation Center, faculty, and students.

The counseling-advisor may combine this role with that of faculty facilitator, liaison man, research, or teaching, and have his student load pro-rated. Since the counseling-advisor's role does not begin until the junior year is already under way, he could begin this function after serving as a T-group trainer during the initial phase of the junior year.

The counseling-advisory role will be to:

1. Act as clarifier and be someone with whom the student can talk.

2. Encourage the student to express ideas clearly and explicitly at the deepest level of his understanding by asking him to expand upon and explain his terms and cliches.

3. Help the student, throughout the second semester of the junior year and the entire senior year to explore, analyze, and synthesize his thinking pertaining to teaching, children, schooling, learning, and other aspects of his goals.

4. Suggest that the student alter his program if the change will help him reach his goal. (The counseling-advisor must make appropriate arrangements with the program to implement the change.)

The counseling-advisor will be responsible for:

1. Accepting the baseline goal paper and helping the student cope with the task of writing the final goal and planning paper in the senior year.

2. Accepting the final goal and planning paper.

3. Meeting with each of the students at least once a month, perhaps every three weeks, from the start of the second semester of the junior year through his graduate year.

4. Reading the diary-log of each of his students twice a month, summarizing the information to provide feedback for individual development, with the abstractor-recorder in the center.

5. Attending periodic meetings with other advisors to share and discuss feedback from students.

6. Preparing required papers for the director of the Facilitation Center, faculty, and students, summarizing feedback and comments from students in the one-to-one conferences, and from other sources of information such as the student newsletter.

The counseling-advisor should know the field of elementary education well enough to help the student maintain a reality dimension in his planning. The counseling-advisor should be conversant enough with the literature in the field to suggest sources for the student in his developing inquiry. In addition, the counseling-advisor should be a person with the following three personality characteristics, suggested by research (137), (105) to be the key personality characteristics needed for good counseling:

1. Accurate empathic understanding of the student.

2. Unconditional positive warmth for the student.

3. Self-congruence or genuineness.

In arriving at this conclusion, Truax (137) reported a series of studies which analyzed tapes made at counseling interviews of persons ranging from college students to hospitalized schizophrenics. The analysis scales used in these studies are described by Truax and Carkhuff (138). With these scales it is possible to rate a counselor in terms of his apparent accurate empathy, positive warmth, and self-congruence during a counseling interview, and it is also possible to select counseling-advisors after a trial period who are rated high on scales of these three traits. Thus, persons thought to be good candidates for counseling-advisors might be hired for a trial period during which occasional tapes of their advisement would be analyzed by the counsultants who were working as counseling-advisor trainers. The counseling-advisors would be taught how to analyze their own tapes, and in the process it is hoped that many would improve in their ability to establish and maintain the best possible helping relationships with the students. Probably this initial period would demonstrate to a few counseling-advisor trainees that they were not able to establish and maintain the kind of a relationship that was needed to help students take responsibility for their own learning. These people should not, obviously, continue as counseling-advisors, but should be helped to work elsewhere in roles that would draw from their strengths.

Faculty Facilitators

A faculty facilitator will be chosen by the student members of an enabling seminar if they desire a trained leader. The facilitator will become a member of the program staff, but not necessarily a member of the education faculty. For example, he may be a director of a community agency such as the Urban League, a child psychologist, a professor of another school or department, etc.

The faculty facilitator's role will be to:

1. Help students go through the problem-solving experience.
2. Clarify and introduce new ideas, raise questions and throw out challenges.
3. Allow the students to decide how the seminar is to progress, and what it is to become.

The facilitator will be responsible for meeting with his enabling seminar for a two-hour period each week. (This is subject to change depending on the enabling seminar members' decision).

The T-group Trainer

The T-group trainers will become a part of the Facilitation Center staff following completion of their tasks with Module PST-1. Upon completion of Module PST-1, the T-groups dissolve or become enabling seminars. At this time the trainer may change his role to that of advisor, faculty facilitator, or liaison man. (See Professional Sensitivity Training Component, Module PST-1, for a description of the T-group training.)

The Field Consultant

The field experience consultant would act as a representative of the Facilitation Center director in arranging field experiences and for summer training. He would assist students in obtaining experiences (especially during the two planned graduate summers) on a semi-professional basis in agencies, foundations, institutions, etc. For example, a student might work in an educational film library screening and evaluating new films, writing pamphlets or catalogs, or assisting the users of the library in making up their film program.

The field coordinator would also obtain resource materials such as "introductory packages" concerning a professor, a clinical professor, clinical teacher, or an authority who may be called upon on a consultant basis. (These packages would contain the subject's published and unpublished writings, monographs, research papers, articles, books, etc.; background information about him (vita sheet); and audio and video tapes or films of his teaching, discussion, interviews, etc.)

Materials will be housed in the Facilitation Center, and the field consultants should work closely with the librarian to avoid duplication of effort and materials, and to insure that the collections of each supplement and complement the others.

The contact man should keep in close communication with the counseling-advisors, and attend their periodic meetings.

Liaison Man

The liaison man would establish and maintain communications and feedback between the enabling seminars and the Facilitation Center. The liaison man may work at two jobs in the Facilitation Center, for example, he may also be a counseling-advisor. He may act as a T-group trainer during the first semester of the junior year, and assume the role of liaison during the second semester.

The liaison man would be responsible, in cooperation with students, for:

1. Designing, establishing, and maintaining channels of communication and a method of obtaining feedback from the enabling seminars. In some cases, he might make recordings of meetings if this activity did not restrict free and open discussion.
2. Meeting periodically with the enabling seminars in order to obtain feedback and information for the Facilitation Center.
3. Participating in providing materials for the resources center, such as searching for and selecting stimulus media (see description under resources center), mediated field experiences, and suggesting production of new materials by the production supervisor.

Librarian

The head of the curriculum library and the specialties component resource center will be a professionally trained person or persons. The librarian must be capable of making decisions concerning selection and procurement for materials, of preparing them for circulation, of giving assistance to students in their use of the library, and of dissemination of information concerning resources and their availability.

The responsibilities of the librarian and/or specialists will include:

1. Conducting a continuous survey and search for literature and resources to keep abreast and informed of new education occupational specialties, developments, and materials.
2. Consulting and advising with program, faculty and staff concerning their needs.
3. Making professional decisions about the selection and procurement of materials, including value judgments.
4. Insuring that information concerning resources is disseminated regularly to students and faculty.

5. Insuring that materials are catalogued and processed according to professional library standards and methods, and are made readily available to students.
6. Insuring continuous review by qualified personnel of materials, and periodic withdrawal of unsuitable or out-of-date materials.
7. Providing facilities, equipment, and assistance for use of stimulus materials, including audio-visual, self-instructional, and self-paced materials, speakers, consultants, etc.
8. Keeping appropriate and required records of the functions and use of the library.
9. Initiating and incorporating needed changes as indicated by feedback from library users.
10. Supervising and evaluating library personnel.
11. Making recommendations to the director concerning the library's materials, equipment, facilities, and personnel needs.
12. Participating as a professional member of the instructional team in planning the program resources in order to understand program goals in relation to selecting and withdrawing materials and providing services.

Production Center Supervisor

The production center supervisor would be responsible for production services to students. He should provide equipment, materials, and services for the production of the student newsletter; for the making of slides, overhead transparencies, audio and video tapes, filmstrips, motion pictures, and for duplication of printed materials which are to be used by students in their assignments and teaching. The production center could be used as a teaching facility, workshop, or for experimental work by students.

The relatively inexpensive and easily maintained equipment for production of printed materials, slides, audio tapes, overhead transparencies, etc. should be located in such a center. If more expensive equipment or that which takes special training to use is needed for a unique or special production, it might be borrowed from another department or a commercial firm.

The supervisor's qualifications might range from practical experience and training to highly specialized professional training depending upon the role of the production center and the capabilities of other persons available to the Facilitation Center. In the case where production of materials is not part of students' learning experience, the audio-visual department's production unit or a near-by commercial firm might serve the program efficiently and more inexpensively than the resources center. The needs of the students, quality requirements, and comparative costs should be considered when making decisions as to staffing and purchasing equipment for the center.

Abstractor-Recorder

The abstractor-recorder would maintain a record-keeping unit where student diary-logs would be summarized and stored. He would be responsible for a monthly abstract of each log, and for counseling-advisors' summarized conferences showing the student's growth and progress. The data would be kept in an up-to-date form ready for the counseling-advisor's use in briefing himself before a conference with the students.

The data might be fed into a computer which could provide continuous information, correlations and report indicators or danger signals in the student's progress and activities.

The abstractor, with or without the assistance of the computer, should summarize a student's progress around certain criteria which might include:

1. From the student's point of view:
    a. How well is he coping?
    b. What is the impact of the program? Does he feel satisfied?
    c. What are his specific skill needs?
2. From the advisor's point of view:
    a. How adequate is the student's progress in asking pointed questions which develop his interests concerning his possible occupational security?
    b. Are questions pointed enough to enable the student to search for answers?
    c. Is he making an adequate search for answers to the questions?
    d. Has he synthesized the results of his analysis to the point where he has laid to rest his question?
    e. In summary, what progress is he making in thinking about his central aim?

Resources Center and Student Support Service

The Self-Directed Component Resources Center should be housed in a readily accessible location to other program facilities, especially the study and meeting areas. Its collection should include printed materials, audio-visual materials and the equipment for their use, e.g., study tables and carrels, chairs, typewriters, a reproduction machine for copying pages from books which conforms with accepted library practice and copyright laws, tape and record players, projectors for slides, filmstrips, 8mm and 16mm motion pictures, overhead transparencies and opaque materials, and teaching machines. It would be desirable to have some portable audio-visual equipment which could be borrowed for use outside the resources center. Students may wish to use materials in meetings, seminars, or in their own rooms.

Storage facilities, cabinets, cases, shelving, etc., should be constructed or purchased to insure safe-keeping and avoid damage from dirt, handling, heat, and humidity.

Personnel must include inspectors and processors trained in cleaning and repair of materials, especially film and equipment.

In addition to the occupational specialty and curriculum library materials, the resources center should have stimulus media including open-end discussion films and audio-visual materials which involve students in real or simulated situations.

FACILITATION CENTER STAFF AND PERSONNEL

Position	Role	Responsibilities
Director	Directs the activities of the Facilitation Center and its staff and insures that its services to students are maintained.	Is responsible for Facilitation Center and its staff. Evaluation of FC staff services. Coordinating and supporting Enabling Seminars. Providing leadership to the FC staff. Operation of communications and feedback system. Recommendations, reports to FC Director.
Counseling-advisor	Advises, clarifies on one-to-one basis for students.	Assists students in development of ideas and aims from baseline goal paper at start, to final goal and planning paper through assessing teaching experience in graduate year. Meets with student and reads diary-log periodically. Attends meetings with other counseling-advisors. Provides information and feedback to the Facilitation Center.
Faculty Facilitator	Clarifies, challenges, helps student go through problem-solving.	Meets with Enabling Seminar once a week.
T-group Trainer	Troubleshoots for Enabling Seminar	Does not become part of Facilitation Center until after end of first semester of the junior year.

Field Consultant	Arranges field experiences, summer training and work, consults with advisors-counselor.	Obtains resource materials, information on field experiences, summer work, makes arrangements for students.
Librarian of curriculum center and/or resources center for occupational specialities	Provides materials, prepares them for distribution, disseminates information concerning resources.	Surveys, searches literature and resources. Consults with program and Facilitation Center staff. Insures operation of library or Resources Center as to professional library standards and methods. Assists students in use of materials and equipment.
Production Center Supervisor	Provides equipment, materials, services to student for production of materials to be used in assignments or teaching, student newsletter.	Maintenance of equipment, supplies. Advice and assistance to students. Obtaining specialized equipment or services.
Abstractor-Recorder	Handles feedback, record-keeping on individual development of students.	Stores, abstracts, students' diary-logs. Maintains continuous, up-to-date records, information for advisors-counselors.
Computer-Programmer	Programs, stores, retrieves student information.	

CHAPTER 10

SCENARIO

The purpose of this scenario is to breathe life into an otherwise explicative document. The character's five years in the project are taken to be normal in the sense that what literally happens to him will figuratively happen to all students. Experiences will be structured that will cause him to consider questions as far-reaching as the nature of man and as immediate as lavatory period. If the character seems too self-reliant, then so be it. It is intended that the character be as much learner as teacher and in both these roles, self-reliance is a necessity.

Eighteen year old Jack Petrillo is a freshman from Brighton, New York, a suburb of Rochester. He participated in a number of activities in high school, and was voted "the most personable boy" in the senior class. Jack selected Syracuse over three other possibilities because he liked, "its size, the fact that it is co-ed, fairly close to home, and has a lot going on all the time". He is unsure about his future aspirations although his mother's fourth grade teaching experience has given him a vague interest in becoming a teacher. He expresses this interest to a frosh-week advisor who suggests he take the Liberal Education Component of the university's elementary education program in addition to other freshman courses required by the university. The advisor explains that this in no way commits Jack to the program since he can opt out at any time if he so desires. The reasonableness of this impresses Jack, and he signs up for the course.

As his freshman year goes by, the Liberal Education work of the teaching program impresses Jack. At bull sessions, he expresses the feeling that somehow he is learning more in the group meetings of the Liberal Education Component than he is in the regular Liberal Arts courses.

> You know, what I really like is that we don't have to worry about pulling a hook in that course. I'd like to do well, but if I get a "pass", that's OK too. I really hate worrying about marks all the time, particularly when my parents are bugging me in every letter about them.
>
> I never really thought much about myself until we began our readings this semester. You know, you're there and that's it. The concentration of those readings sort of pulls a lot of different ideas together, and the seminars are something else. You know that Prof. Bland really

> knows how to make you feel uneasy. He hasn't answered a question all semester, but you always come out feeling you know something you didn't know the hour before. That's a feeling I don't get in my other courses. I guess it's maybe that now I feel I can talk about ideas better than you guys.

At the end of the year Jack passes the course, but cannot decide about going on with the Liberal Education Component in his sophomore year. He doesn't feel competent in the sciences, and he's never been exposed to the social sciences. He thinks he'll drop the course at the end of the year, and discusses this decision with his advisor. The advisor tells Jack to remember that the first year's experience wasn't really what he expected, but that he did satisfactory work and got (in his estimation) much from the course. Realizing he can leave the course without penalty if he does poorly, Jack decides to register for the course and see what happens.

During the fall semester of his sophomore year, Jack's conception of science begins to alter somewhat. Science has always been "certain"; now he feels that perhaps man really doesn't have all the answers as his former teachers had led him to believe. The weeks of discussing Man as Manipulator are particularly enlightening to him and somewhat bothersome. He writes to his folks:

> It's funny....I feel as if I'm in two separate schools here. On the one hand I go to classes, learn what I'm supposed to learn, pass my tests, and that's it. It's like it was in high school...there's a given body of facts that I have to know and I learn them. On the other hand, the Liberal Education seminar I'm taking seems to question all this. We've been talking about unassisted reason, the limitations of understanding, and man's perception of reality (impressed???). Man doesn't know all the things he claims he does, at least he didn't in the past. Things that seemed to be certain become so imprecise when viewed from a different dimension. What makes us so sure that what we say is certain today, really is? For example, that paper you sent me last week (thanks, by the way) telling about the kids fighting in Rochester....I told this to the group when we were speaking about man's perceptions. This one Negro guy in the group asked me if I wanted to hear the other side of the story. Come to find out he's from Rochester, and he said that the day before the fight a bunch of white kids had driven down Clarissa Street throwing water balloonsat people on the street and calling them Niggers. They even hit some small children on the sidewalk. He says that's the way the fight really started, but that never got in the papers. I'm not saying he's right...

> I don't think either side is right. It all depends on how you perceive what's going on.

The fact that his father wrote back, "Those Nigger kids are always fighting," doesn't help Jack's uneasiness.

During the spring semester of his sophomore year, Jack realizes he has to decide upon an area of concentration for his junior and senior years. Thus far, in the liberal arts courses he's taken, no one area stands out as being something he'd like to concentrate in. The most meaningful and useful part of his first two years has been the Liberal Education Component of the Elementary Teaching Program. He is, however, still undecided about pursuing a career in teaching. He'd like to be able to live comfortably when he gets out of school, and that requires a good job with good pay. Yet he'd also like to make some positive contribution to bettering society. These two requirements seem mutually exclusive. The rewards of elementary teaching are not particularly materialistic. Yet Jack feels he would be happier doing something he felt was needed rather than being just another cog in the wheel of a giant corporation. Besides, the seminar has raised some interesting questions in his mind. It was a stimulating success, that much Jack knew. Yet was it the style of the professors, the size of the class, the things they read, or the manner in which they discussed ideas--or what?--that made it so. These questions send Jack in search of answers--answers that will lead to his future endeavors.

The guys in the house don't help him much, so Jack makes an appointment with his advisor to discuss his questions. Jack's advisor hasn't any answers for him either. He suggests that Jack get in touch with the elementary education people--maybe they can provide him with some help. He gives Jack the number of something called the Elementary Education Facilitation Center. Jack calls and makes an appointment with the center's director, Mr. Robinson, to discuss what the elementary education program offers to a junior at Syracuse.

The Facilitation Center is in a ramshackle old house, and Jack is unimpressed as he goes inside. Mr. Robinson is a little late in meeting him. Finally...

R: Well, Jack, what can I do for you?

J: Well, I'm interested in El. Ed., and my advisor recommended that I come and speak to you about it.

R: Tell me a little about your background and why you think you might be interested in our program. If I know you a little better, I'll have a better idea of where to start. Fair enough?

J; Sure. First of all let me say I'm not really sure that I want to go into teaching. I guess my interest stems from the fact that my mother is a teacher. I'm in the Liberal Education Component of the program, and that has really turned me on about teaching for a variety of reasons. For one thing, it has raised a whole series of questions that no one seems to have answers for. These questions seem to arise from the process of teaching, and this is another reason why teaching interests me. I kind of emulate the men that taught the seminar and in a way, if I could be like them, I feel I'd be a good teacher. I don't want to be a poor one. Also the seminar was taught in a way that was different from anything I had done before. I seemed to get more out of the Liberal Education Component than I did from my other liberal arts courses. I was able to talk about ideas with my buddies that they seemed unable to express. The seminar is really helpful. If I can learn to organize ideas and present them the way they were presented in the program seminar, then teaching really interests me. If on the other hand, I'm going to be nothing more than most of the teachers I've seen who have come out of the schools of ed., then I don't want to go into teaching.

R: Do you know anything about our program?

J: Only through the Liberal Education Component which didn't tell me anything specific about the program.

R: OK--let me give you a rundown on our basic operation here. If you have any questions as I go along, jump in. The program is organized around five subject areas which are taught in modules. Modular sequencing is something new we're trying in an attempt to break the one semester/sixteen week concept of a course. Basically, a course is organized into varying units of instruction. They vary in the time one spends in the modules, the method by which they are taught, and the material to be taught. By the way, I didn't mention the names of the components. They are Social and Cultural Foundations, Child Development, Professional Sensitivity Training, Curriculum Methods, and Teaching Theory and Practice.

Another thing we're trying to do is to make the students more responsible for their own learning. In many cases, you will proceed through the module by yourself or with a small group of fellow students at your own pace with the responsibility for your own progress and much of the evaluation left up to you.

J: I don't quite understand your last point. Do you mean that we mark ourselves?

R: That's correct. Most modules are designed so that you take the responsibility for your own learning and that includes evaluation of your own progress. If you need remedial work, then you and your advisor set it up together.

We have two areas that we are very excited about in terms of their being unique parts of our program. They are the Professional Sensitivity Training and Self-Directed parts of our program. The PST component has as its goal the way you can question your actions and motives for entering teaching and the profession in general. I don't know if you've heard of Training Groups or not, but this is the means by which we accomplish this. At the end of the T-group sessions, you choose one of our counselors who remains very close to you throughout the three years of the program. You meet with him at least every two weeks to discuss your progress. This close partnership is another unique part of our work here.

J: That sounds fine. The Liberal Education Component has started me questioning myself and how I feel about certain things, like what I feel might be a basic fear in myself of being rejected. Is the PST part supposed to help me in figuring this out?

R: Yes--at least partly, yes. The other part of this is in the Self-Directed Component. If you choose, you will be able to meet with a group of students to discuss things that affect you, and are important to you as an individual and to the group as a whole. If you wish a person you know to be a leader of the group, whether he is on the faculty, on one of the schools we have students in, or some person from the community, you can have him do so. If you choose to remain leaderless, you can do this, too. It's up to the group. We hope that the enabling seminar (which is what this group is called), and the newsletter that comes out of the Self-Directed Component, will not only help you as a student, but will function as a forum and monitor for the program to bring up certain dissatisfactions the interns have and as a a device to maintain communication between members of our program.

J: When do we learn to teach? No, what I mean is when will be the first time I get to teach?

R: I wondered if you would get around to that. It depends upon what you mean by teaching. I'm sure from your experience in the Liberal Education part of the program you realize there are many different connotations to the word "teach". Next year, if you choose to come aboard, you'll have quite a bit of experience as a tutor. The way we handle this is to place pairs of students in our T and M centers (that's "Tutorial and Microteaching") centers. You will work individually with a pupil who has been picked for special remedial help by one of our clinical teachers. The extent of your pupil's problem is easily solvable by you in your sessions. We do this to give you some experience in working with a young child, and it also meshes nicely with tutorial work that is required in some component modules you'll be taking. Actually, we hope you can get the opportunity to tutor several children during the course of the year. Towards the end of this year you'll do some micro-teaching. Have you ever heard of this, Jack?

J: No, I can't say that I have.

R: Well, we look at micro-teaching as a way of having a student become more sensitive to how he may come across to a classroom of pupils. This focus differs a bit from some other institutions. We select a small group of pupils from our Tutorial and Microteaching Center, and have you teach them several brief lessons. Your lesson is video taped and then reviewed by you, a clinical teacher, and one or more professors. It is even possible that we might have some older children in there giving their reactions to the things you did. You know how honest kids are.

J: When do we face a full classroom of kids for the first time? It would seem to me that there would be the real challenge.

R: That happens in your senior, or professional, as we call it, year. What we try to do is to cycle you through increasingly complex activities until you are engaged in that most complex activity of all, teaching a classroom of youngsters. For example, you will learn to select materials to teach a certain concept, you will learn how to design your own tests to see how much the pupils know about that concept before you teach and how much they have learned after you teach the content. You will learn how to plan a lesson or series of lessons in order to most effectively teach your concept. Each of these activities is taught to you by a clinical professor, someone from the Teaching Center who is a highly trained specialist, and who has gone through exactly the same modules that you will go through. Not only will you do these activities once, but several times in several Teaching Centers.

J: I don't quite understand. Do you mean to say we will learn how to plan a lesson more than once?

R: That's right. You will go through the cycle of activities in more than one teaching center to get used to planning for different kids who have different needs. Also using a variety of clinical professors will show there is more than one way to plan a good lesson. By putting you through such a training program, you will be qualified to accept a half-time teaching load in your resident year.

J: You mean this is a five year program? I didn't know that.

R: Well, Jack, that depends upon you. Actually you can drop out of the program at the end of your professional year without losing any credits toward graduation if you plan your other courses correctly. We hope, however, that sometime during your pre-professional and professional years you'll develop an interest in something you might wish to become "expert" in that you will wish to pursue into your resident year. The enabling seminar, your counselor, and we here at the Facilitation Center as well as the professors of the various components will all be assisting you in searching out your area of potential interest. Do you have anything you might be interested in specializing in at this point?

J: Well, I am interested in psychology, but I don't know whether or not I want to specialize in it. Besides, I don't know of any psychologists in elementary school, and it's a subject they sure don't teach. To tell you the truth, I didn't even know it was a social science until this year.

R: OK. Let's use psychology as an example of what might

> happen to you.

Mr. Robinson goes on to explain how Jack can explore the areas of psychology during his pre-resident training and how any number of options are open to him. The organized special projects during the resident experience will allow Jack to pursue whatever specialization he decides upon in a school setting. Jack is impressed with the amount of time set aside for the development of his interest in a special field, and thinks the summer that is devoted entirely to a specialty would be great. Often, he and his buddies have complained that college never provides enough time to pursue the things you are really interested in. Jack is also impressed with the fact that he can leave the program at the end of his junior year if he doesn't like it and still graduate with his classmates.

After Mr. Robinson gives him a tour of the Facilitation Center, Jack leaves the building somewhat relieved. The freedom and self-direction of the program appeal to him, and he decides to enter the pre-professional phase to see what it is like.

In addition to the natural sciences module of the Liberal Education Component, two experiences confront Jack when he returns to school the following fall. He finds himself one of a group of twelve students in the first program component of his pre-professional year. He is told that the group will meet for ten three-hour sessions, the purpose being to examine the processes of group interaction. At the first group meeting, the faculty trainer explains that each member is to keep a journal of his reactions to that which transpires during the T-group sessions. The recording of one's experience will help crystallize what has happened to him, and might provide a means of assessing personal changes during the sessions.

In addition to the T-group, Jack takes several evaluative surveys for the Curriculum Methods instructor, Mr. Shelby. The surveys indicate whether or not Jack has an adequate grasp of fundamental concepts in various elementary subject areas. Jack does well on the survey, largely because of the background he has gained in his Liberal Arts courses and the Liberal Education Component.

The initial T-group experiences are unsettling for Jack; he sees no purpose either in the discussions themselves or in the reasons for the discussions. As the sessions continue, however, Jack's journal indicates an increasing awareness of their function.

Journal entry for Session #2

> After yesterday's session, I was ready to expect anything. Mr. Meyers suggested that we start off the session by reviewing what went on yesterday. Again, another silence....if there was one thing I didn't

want to talk about it was what went on yesterday. Who the hell knows what went on yesterday...Meyers sure doesn't. All he does is sit there, smoke his damn pipe, and nod his head. I really don't think he's got the slightest idea what he's doing.

Anyway, back to today. What bothered me the most was the crack Connie Shaw made. After I had suggested that we talk about group size, she shot back, "Why do you always have to suggest a solution to things?" I was only trying to get something started. The lack of substance to that thing really bothers me. To make things worse, Meyers asked the group if anyone else had perceived my remark the way Connie had. Tim said he had, and Larry noted that I did the same thing yesterday. Joan Davis said she was about to say the same thing I had said. By this time, I had shut up. If they didn't want my help, the hell with them. I don't think I was ever so uncomfortable in my whole life.

Yet, as time went on, I just felt I had to say something. The knot in my gut got harder and harder. I guess what was doing it was the way Connie was talking, although after her remark I was pretty angry at her. She was too damn sure of herself. She always wanted to be a teacher--seeing her sister teach convinced her that she could, too. The kids needed a person like her because they all needed someone who really cared about them. I told her frankly that if she were my teacher, she would turn me off. She was too cocky and gushy. She came across pretty much as a phony. I don't know whether or not she bought what I said, but at least I felt better about it. You know, that's the first time I have ever been that abrupt with a person. I usually worry about hurting their feelings.

Journal entry for Session #8

Today went pretty well. It's surprising how close we've gotten as a group. Even George has finally opened up, and though he doesn't seem quite at ease yet, he's working on it. I feel much more comfortable to say and do what I feel I should without worrying about what people are going to think. It's as if I can sense what they are thinking. We talked about this very thing today. Joan had mentioned everyone seemed so much more "real" to her than they had earlier in the sessions, and we decided that it was probably because we were better able to pick up cues that other members give out.

> I know that I am better able to now. I'm much more aware of how I affect other people. One thing I have to guard against is always agreeing with whatever someone is saying. I never realized that it came across as if I weren't even listening to what they were talking about. It is kind of ironic that Connie pointed this out, and I didn't feel angry like I did the time before. Of course, I think she better understands that her enthusiasm may seem unreal to some people. (How's that for a rationalization??)
>
> I always thought I could get along well with people. It's funny...I still feel that way only I can be much more honest about it. If the things we've talked about hadn't been pointed out to me, I'd never really know how I was actually appearing to others. Some of us talked about this over beers the other night, and everyone has similar feelings. It's been a pretty valuable experience although I wouldn't want to go through it again.

Jack's group decides to remain together in the enabling seminar with the exception of George. After discussing the decision with his counselor, George chooses to go through the pre-professional year alone, meeting with his counselor once every week instead of every two weeks.

Jack's commitment to teaching strengthens during the fall and spring semesters. One specific reason for this is the close relationship he sees between program components. This is the first time in his three years at Syracuse that he actually sees some application and integration among the various courses he is taking. In all the components, two general things seem to be happening. The students are being asked to focus upon cultural and social factors that affect the ways they behave as students; at the same time they are being trained in the behavioral observation and discrimination skills necessary for determining why and how others behave in an instructional setting. In a sense, Social and Cultural Foundations, Child Development, Teaching Theory and Practice, and Curriculum Methods are all speaking about the same kinds of things from different perspectives. In addition to these "professional" courses, the Liberal Education Component's concentration on the humanities has introduced Jack to a series of historical figures whose unique perspectives on the human condition have real meaning for some of Jack's activities.

Jack sees a transfer of these things to the actions of his professors. They themselves exhibit styles of teaching that vary from an almost completely teacher-directed lecture to an unstructured student-directed style. Jack muses that in the past he probably would have accepted one as right and rejected the other as wrong. Now he realizes that teacher personality, educational objectives, content, and student orientation all interact to determine something should be taught. What had always seemed to be a rather spontaneous act to him was rapidly becoming something that could be planned for.

In addition to this, Jack is beginning to realize that the school is representative of something much larger than mere student-teacher interactions. In studying the school as a social institution, he begins to realize that it is also a mirror reflecting the whims of society. Death at an Early Age helps point this out to him. The editor of a controversial local black newspaper reinformces this when he speaks to Jack's enabling seminar. Jack remembers the Negro who had told him about the Clarissa Street fights, and can't help but think that he would have had a good deal more to say if he had not perceived Jack as being a somewhat hopeless case.

The tutorial experience in his pre-professional year gives Jack another new experience. Before this, the closest Jack had come to being a teacher was an observer of mediated and live teaching episodes. Now he is able to actually teach a youngster with the clear hope of aiding that child surmount a difficulty in learning something. The resident teacher in the Tutorial and Micro-teaching Center discusses with Jack the problems the little girl has. The teacher has noted the child seems to be unable to subtract correctly. Jack's task is to see if he can gain some understanding into the problem. It could be that she merely was absent during the time those instructions were given, and hasn't had time to catch up with the other kids. Through the Child Development Component he observes the little girl before they actually meet, and notes usable data concerning her mannerisms. He feels that his first session goes rather well in that the child seems to understand everything Jack talks about. Jack is anxious to see the video tape of his "performance". Upon viewing the tape, it is apparent to Jack that he isn't quite as successful as he thinks. The tape shows that he talked at least 3/4 of the time; the child was quite polite but quite unenlightened. An analysis of the tape reveals several causative factors. He appears very anxious, and this contributes to his almost constant chatter. Secondly, he realizes he has made no record of the child's performance in subjects other than math. For this reason, his instructional activity and materials were not within the student's frame of reference. He wonders why the student didn't tell him he was unintelligible, but he catches himself in a sad realization; the student reacts to him as just another teacher and not as Jack Petrillo.

Jack is struck with the irony of the situation. He knows about instructional materials; he knows his students; he knows how students perceive teachers; he knows some ways of presenting content, yet he doesn't really know anything.

A discouraged Jack relates all this to his counselor at their regular meeting. The counselor asks Jack what kind of a teacher he would be if he didn't feel this way. Jack replies he'd probably be a happy but poor one. Together they explore alternatives for Jack's student, and he leaves the office a bit more at ease. As he walks back to his room, he reflects that if nothing else he will have an interesting baseline goal paper.

In the next tutorial session, Jack is more at ease. He lets the student do most of the talking, and soon the child is chattering happily about all her brothers and sisters, her school, and her teachers. From his observation of the second tape, Jack perceives a peculiar habit of the girl. She doesn't answer his questions correctly unless she is looking directly at him. He notes this, and in reviewing school records discovers the girl has never had her hearing checked. He arranges for this to be done through the Facilitation Center, and learns the child has a 90% hearing loss in her left ear. This explains much to Jack. The new hearing aid does wonders for the tutorial.

Jack is fascinated with the girl's progress and becomes interested in discovering if any other students have had similar experiences. He writes of his episode in the newsletter and during the next three weeks is contacted by eleven people who have had similar experiences. His counselor suggests he might be able to utilize his Child Development professor in exploring the problems of children like his little girl. Jack discusses the possibility with his professor who tells the students they can utilize the open module to develop a paper on some area of physical defect behavioral manifestations. Since the students have encountered only sight and hearing disabilities, they decide to concentrate their paper only on these. They reprint their final product in the Facilitation Center, advertise in the newsletter, and make copies available to any students who are interested.

After the experiences of his pre-professional year, there is no question in Jack's mind as to his choice for the following year. His goal paper indicates an eager willingness to continue into the professional phase of the program and pursue a B.S. in Elementary Education.

Jack's professional year is quite unlike the year he has just finished. The pre-professional experience takes a global, generalized view of the multi-faceted areas of teacher education; the professional year's endeavors are much more specific. In each of his components, Jack digs into the research literature that stands behind his modular experiences, and applies the principles gained from the literature in several practical teaching situations. He faces his programmatic change rather abruptly--the first module he takes in the fall semester concerns basic statistical measures needed by teachers. The purpose of the module is twofold: the comprehension of statistical measures used in research findings and competency in using statistical procedures in the classroom.

Later in the year, the students in Jack's enabling seminar are asked by a group of junior pre-professional students to give their impressions of the professional year. They decide to summarize the activities of each component and then entertain questions. A part of the Facilitation Center's transcript of the meeting with the students follows:

CURRICULUM METHODS (Tim)

I think you could say this was the year we all learned what organizing and presenting subject matter was all about. First we went over the selection of teaching activities and materials, the meaning of standardized tests, construction of our own diagnostic devices to find out what the kids really know about what we're trying to teach them, and planning units for both individualized and multigrouped lessons. We did this at the university and at the Teaching Centers. Now that I think about it, we did it mostly at the Teaching Centers. We did so much running around, you kind of forget where you do what. What was the most important to me was that we accomplished these activities in several Teaching Centers, and were taught by expert clinical teachers. They really know their stuff. And besides this, they have gone through the same modules we have, so they are pretty much aware of what our problems might be. I never realized that so much of planning depended upon what you know about the kids. And the kids are so different from Center to Center. It was fascinating trying to teach the same thing in two of these settings. The tutoring and micro-teaching that I had last year really helped me get through this. I was constantly forced to ask the question, "How is that kid I'm talking to picking up what I'm saying?" Without the experiences I had in the Child Development and Teaching Theory and Practice modules, I would never have been able to do this. In fact, I probably would never have realized I should be doing this. Not that they gave me all the answers, mind you but thanks to them, I did feel confident.

Now aside from these nitty-gritty aspects of teaching, we stepped back a bit and looked at curriculum as a whole. That is, we examined some problems of curriculum in general, went over some ways of evaluating the merit of a given book or some other kind of curriculum package, and finally did some neat bits of role-playing in which we might justify the use of one bit of information or textbook to a group of irate parents.

I guess that's about it in a nutshell. Joan.....

TEACHING THEORY AND PRACTICE (Joan)

Tim's already told us something about my part of this program so let me start where he left off. I might say before I begin that this component seemed to deal with more fundamental concepts than did any of the other components this year. Social and Cultural Foundations was pretty basic too, now that I think about it, but in a different way. Anyway, we looked at the teaching process itself. We read much research data that attempted to isolate what was actually occurring in the classroom, and in connection with this we learned what seemed to be an entirely new vocabulary. Teaching is more of a "science" than you think. Did you know that there are actually teaching activities from which predictable student behavior arises, and that you can learn to use these techniques fairly easily? Practicing teaching and video taping helped a great deal. You have no idea how many different kinds of behavior actually transpire in a classroom. As a result of the module, we are able to group these kinds of behavior, use a variety of teaching strategies to cope with the behavior, and with some of the materials we discovered in the Curriculum Methods Component, bring the student along to the objective we have for him. For instance, I had three boys in the small group instructional module that were pretty obnoxious. They just wouldn't stay in their seats, and kept throwing their hands at me all the time. I interpreted this action as a means of getting some attention, but it seemed to me from what I'd learned about reinforcement theory that if I gave them more attention, they'd only throw their hands more. So I ignored them and only reinforced the behavior I wanted for my class. This was the technique of contingency reinforcement. After a couple of fairly noisy sessions, they seemed to know that I didn't even see them unless they did the normal things I expected from everyone else, and they began to quiet down. They weren't entirely quiet, but I didn't want them that way. I just wanted them to see that they could get my attention in another, more acceptable way. And incidentally, an analysis of the interaction in my classroom showed I was being much more supportive of the kids, and my disciplining remarks decreased. This is another technique we learned by which I was able to monitor my own teaching behavior. I didn't mean to run on so long with a personal story, but I felt a specific example of something we did would be meaningful to you.

CHILD DEVELOPMENT (Jack)

Joan mentioned reinforcement theory, and this is a good "in" for me. We learned about different developmental theories this year, and Reinforcement Theory was one of them. I'm getting ahead of myself, so let me go back to the beginning. We began the year asking the question, "What role does theory play in the child development field?" and implicitly, "How can we use child development theory in the classroom?" As the year progressed, we asked probably more basic questions such as, "What right do we as teachers have to take upon ourselves the changing of another human being's behavior?" This is a moral question of the deepest meaning for teachers because after all that is what we do when we teach. Indeed, listening to some teachers speak, that is all they try to do. One exciting seminar we had was sort of combined with a book we read in Social and Cultural Foundations. We discussed whether or not the Reading Teacher in Kozol's book was a moral person. Try doing this sometime, especially in light of the experiences you've had in the T-group.

What I liked most about this component, as well as the other components, was that after this initial introductory module, we weren't tied down to any particular sequence. We could take the modules in the sequence that interested us the most.

Those of you who've gone through the Liberal Education Component may recognize some of these names, but I'm going to mention them anyway. Basically, we examined the work of four men, each of whom represents a different theoretical perspective. They were Piaget (Cognitive Theory), B.F. Skinner (Reinforcement Theory)--you remember reading Walden Two in the Natural Science Liberal Education Component; Erik Erikson (Psychoanalytic Theory) and Arthur Combs (Phenomenological Theory). What was really neat was viewing those video tapes of Erikson and Piaget, and we even got to talk with Erikson over a conference phone. Without going into the theories, that was basically what we did. Incidentally, unlike a psych course I took, the material was not merely mental symnastics. We were really able to use it in Teaching Theory and Practice and our Curriculum Methods work.

PROFESSIONAL SENSITIVITY TRAINING (Larry)

I can assure that this year didn't start off like last year in terms of some of the experiences you have gone through up to this time. It seems to me that the most appropriate comparison can be made with the Social and Cultural Foundations Component as you are now experiencing it. We have talked about ways that have increased our awareness of ourselves as members of the teaching profession and education system as a whole. This seems to jive with some things I remember talking about in my professional year. Most of our practice has been in role-playing situations, and viewing of video tapes. At one point, we decided as a group to go into a kind of T-group thing when it became apparent that we weren't communicating. That's all I'd like to say about this at this time. I'll be happy to answer your questions after the session. Thank you.

SOCIAL AND CULTURAL FOUNDATIONS (Connie)

It's going to be hard for me to talk about the first part of what we did this year because I really don't think you will see its connection. I know if I were sitting out there I wouldn't. What we worked on were the tools used by philosophers in analyzing different kinds of discourse. I didn't have the faintest idea why we were spending so much time on this until I spent a couple of days in a school just listening to what was being said by the teachers and administrators. It's just terrible the way people make broad generalizations which simply aren't warranted. I really want to be able to point these things out to my students as I go into the teaching part of my resident year. They are so important in the way in which people speak of other people and the impressions one forms of groups who are spoken of in invalid ways. It's so strange to me that I could feel something is so important that I really didn't know anything about less than a year ago. That wasn't all we did, though...

In the second part of the component, we looked at many similar circumstances that the Professional Sensitivity Training Component did this year. We analyzed social, organizational, and cultural settings for various types of schools, and tried to determine the impact these factors had on both the students and the teachers. I saw the movie Up the Down Staircase the other night on TV and that picture was just so true in terms of the way the organizations of the school affected the people who operated within it--as well as inverted primary and secondary goals. Because of our modules, I was able to pick out immediately the formal and informal lines of authority and how each worked. It was kind of scary to recognize how these factors are affecting me now. It has more than ever made me determined not to become a person who loses his individuality to the bureaucratic shapers in a school.

The question that followed the session focussed on small points that the students didn't bring out in their panel discussions.

Throughout the spring semester, Jack's meetings with his counselor focus upon Jack's intended area of specialization. The teaching experience and psychological background he acquires during his professional year deepen Jack's awareness of the personality aberrations that can occur as a result of physical disabilities. He wants to spend the summer learning more about the recognition of such symptoms in partially deaf elementary school children. In the meetings with the counselor, he is able to narrow his focus to a more specific area. At first, Jack is interested in education of the deaf in general. He realizes as they explore his interest together that there are varying degrees for hearing loss that occur at all ages. Jack knows the general area of deafness is much too broad to be adequately covered in only two summer months. He, therefore, decides to ignore such areas as congenital deafness and concentrates only upon the kids who have a partial hearing loss that remains undetected until sometime during their elementary school years. Another point he must decide is just what it is about this population he wants to study. Specialized remedial curriculums, different teaching methods, the utilization of instructional technology, and behavioral cues leading to defect recognition are some of the possibilities he considers. His decision to concentrate on the last results from the poignant experience he has had with his tutorial situation.

His counselor has been keeping a folder of items relevant to Jack's interest. What seems most appropriate is a week-long symposium at Michigan State followed by a two-week training session in the "Recognition of Minimal Physical Handicaps in the Elementary Grades". The field consultant phones Michigan State, and Jack gains entry to the symposium with the understanding that he will pay his own way and not be eligible for the NDEA assistance that the rest of the regular teachers in attendance will get. During the session, the question of fall placement also arises, and Jack comments that he'd like a Resident Center in the city because the incidence of the behavior he's interested in would be more prevalent in that population simply because it hasn't been noticed by parents or by teachers. One Resident Center is located in a "changing neighborhood", and the counselor feels the comparisons that could be made at the center would be beneficial to Jack. Jack has heard the other students speak of this school, and indicates that he would be happy with a placement there.

Jack drops in the following week to check on his placement, and is relieved to find it has been verified. His counselor reports that everything is set for the fall, and gives Jack his packet of instructions for the early September meetings.

After school recess and a short vacation, Jack arrives at the Michigan State Campus. He registers for the summer symposium, and finds he is not only the youngest but also the least experienced person in the workshop. The speeches during the conference are informative, but in the back of his mind, Jack feels he's heard it all before. The terms and studies mentioned by the speakers are familiar to him, but he has the feeling his fellow participants are treading on new territory. He also has the feeling they really don't care that much, but this could be a mental set acquired in the Social and Cultural Foundations course last semester. The training sessions are even more enlightening to him. He realizes the large majority of his fellow participants are not able to see what is really happening in the classroom tapes they view. It took almost one-third of the sessions to get past the "bad" behavior of the kids to a discussion of the disorders that might be causing them. They were so involved with the institutional discipline requirements they worked under that it was difficult for them to view the kid and his problems separately. Jack realizes how important it is for him as a teacher to be able to make these decisions and not worry about how the "system" will react. That is one thing the people at Syracuse have developed. He does blunder, though, in mentioning that he hasn't taught yet and from that point on he gets the distinct impression that his comments are politely ignored as being from the one "who hasn't had enough experience". His most beneficial experience comes when he expresses his misgivings to the project director. The director, recognizing Jack's plight, gives him a special task--that of cataloguing the occurrence of certain behaviors of deaf children from a set of video tapes. In this way, Jack is able to get some idea of the frequency of the occurrence of a particular behavior in a particular classroom setting. He does so well on the task that the director hires him as a Graduate Assistant for the two weeks following the end of the practice session to complete a preliminary matrix of teaching styles vs. reactant behavior. At the end of the two weeks, with matrix in hand, Jack returns to Brighton for a much- needed change. The remainder of the summer passes quickly, and Jack returns to Syracuse.

His first day is a rather rushed, harried experience in the Resident Center. Jack and his teaching partner, Larry, attend the various meetings: the principal, vice-principal, and chairman for the Guidance Department explain policies and regulations concerning discipline, parent conferences, phone calls, gum chewing, and lavatory privileges. The vice-principal goes on to explain that his office is always open, and if anyone has any problems he'd be happy to explain the school's policy toward that particular problem. He reminds the students to check the teachers' handbook first, however, because his time couldn't be used up with conferences regarding regulations that were spelled out in there.

Jack and Larry meet Mr. Kooney, one of the resident teachers at the Center, during lunch. Mr. Kooney has been in the system five years, and is picked for his position on the basis of recommendations from school and university personnel. The year before he had been a resident teacher at one of the Teaching Centers, and has, therefore, gone through the seminars that Jack and Larry have gone through. Mr. Kooney explains that he and the clinical professors are there to be used. While he himself is a generalist, the clinical professors and specialists in the area of measurement, curriculum, and evaluation. The clinical professors will be traveling in and out of the residents' rooms to observe and help them in planning.

Jack's first morning with the children goes as smoothly as can be expected. Larry is there to help him, and in return he helps Larry during the afternoon session. The most bothersome thing to him is the seven interruptions (he counted them) over the intercom, as various people welcomed the kids. Even the head of custodial services added his cheery hello to the day explaining to Jack's third grade what waste baskets were for, why gum was not for school, and how to clean the boards. As the days pass, the reservations he had from the first day's meetings fade as he becomes the instructor of twenty-eight children.

Mondays and Wednesdays are busy days for Jack. Aside from teaching from 8:00 to 12:30, and lunch from 12:30 to 12:50, he works with a special projects team from 1:30 to 3:00 and the Social and Cultural Foundations seminar from 4:00 to 5:30. He finds little time to write in his journal, and there is quite a gap just before the Christmas recess. The day before he leaves to go home, he makes the final entry of the semester:

> I guess I haven't been too faithful in writing in this journal since Thanksgiving. Things have just been happening too fast and furious. I'll try to write somewhat coherently about the main things

that have concerned me.

First of all, my work with the clinical professors in the conference meetings has gotten better since we had our little confrontation. They have given me some good criticism and seem to have gotten over being afraid of hurting my feelings. From what they say, I must plan more carefully in the mathematics I am doing. There are so many groups in the class that I guess two different groupings aren't going to be enough. I remember something about this from one of my Curriculum Methods modules, but somehow it just didn't sink in. The clinical professor for instruction has shown me a couple of different methods for grouping that I must remember to write up in the newsletter as I think others would find them helpful as well. Incidentally, Larry has been a great help to me in spotting potential math groups.

I really enjoy teaching. Even those hectic first couple of days getting my feet wet were worth it. I have had no real discipline problems...they really are good kids. I just hope they are learning as much as I am! Jimmy came back the other day fairly beaming. I had called his mother and told her what good work he was doing, and she was so surprised. She thought teachers only called when a child did poor work. I guess not too many teachers from this school do work with the parents. It's too bad we can't meet them on their terms more often. Incidentally, Jimmy hasn't acted up since the call. He even told some of the others that I had called, and now they want me to call their parents. Pretty good technique if I do say so. These kids are so active...the other teachers seem to feel it should be stifled, but it can be used in so many ways if only one sits back and tries to figure out how.

The Special Project team is working out really well. The Center is to be one of the schools that will admit kids with minimal physical defects starting next year. This is in line with the new ruling by the Superintendent that kids with minimal defects should be kept in a regular school setting and not transferred to a "reject" school or even a special class with a school. Mr. Kooney, myself, and three clinical professors have been meeting several times a week in various combinations for the purpose of hopefully identifying the special needs these kids might have and of writing an inservice training program for the teachers who will have them in their classes. The work I had at Michigan State is pretty general to most defects, and I find the contribution I can make to this team really rewarding. Incidentally, the CP's are really sharp. They know their areas well, and are able to help us without a lot of hemming and hawing around. In addition to that news, things are going well. May I express confidence when I say that I think those people involved in the Residence Center operation of our building know a lot more than most of the other staff people in the school when it comes to teaching. That doesn't mean they are not good teachers. Our background just happens to be broader. As a matter of fact, I think we are beginning to effect some sort of attitudinal change in them. I guess our working with the Negro kids and their parents has shown the others that these kids really have the same needs as any other child and from what I've seen in the classrooms I looked into, this has paid off. Merry Christmas.

One of the more exciting happenings during the spring is a heated interdisciplinary seminar meeting. Connie Shaw had not reported the absence of a girl to the office because of what she thought were excusable circumstances. The vice-principal called her on the carpet for this and the session turned into a general harangue about "the students who think they can come in and take over the school." He evidently had had a bad day with the non-resident teachers and Connie got the brunt of his wrath. Some of the teachers in the school who were not resident teachers felt the students were much too permissive with the children and perceived the kids to be "getting out of hand". The director of the Residence Center called a seminar meeting to resolve the conflict. Ordinary seminar meetings of this type were curriculum-centered, but this was a special case and required the entire building staff present. Suspecting what might happen, he also requested one of the Facilitation Center's T-group men to be at the meeting so the hostility wouldn't be misdirected. It seems several interns had done things that were definitely against school policy, as stated in the handbook. In one instance, an intern had been picking up a couple of kids and bringing them to school with her in the morning. Teachers had complained because they felt this was undermining school discipline. Also, during the meeting, the students criticized what they felt were archaic school policies, and said they would rather not follow them. Larry was particularly vehement about "those stupid teachers". Tim pointed out to him that he was doing just what the teachers were doing in stereotyping the students...stereotyping the teachers. Although Larry admitted this was so, he still feels that most of them aren't doing the kids much good. The result of this meeting is a series of combined seminars with faculty members

> invited to air mutual grievances.
>
> In addition, a Resident Center newsletter committee is formed. They decide to publish a newsletter bi-weekly to keep the entire building informed of what the people in the Residence Center are doing. Not everyone is happy with the solution, but at least everyone understands the matter. The resident teachers play a large part in alleviating the tensions by discussing the problem informally with their colleagues.

Jack receives a letter from Michigan State during the spring requesting him to return and continue the work he had done there the previous summer. His counselor agrees this is a worthwhile project and suggests the possibility of having the end product of the summer's activity be the basis of a Master's thesis for Jack. Jack agrees with this idea, and plans to complete his M.A. work by the end of the summer.

His interviews at the Facilitation Center bring him into contact with many school districts. One school district in particular is impressed with his knowledge of hearing problems, and they hire him as a part-time teacher and part-time faculty facilitator. In this capacity, Jack will be responsible for observing all the classes in the elementary school, identifying kids with potential hearing problems, and working along with an audio specialist in identifying the children, and once identified, working with different groups to help them adjust to school and help the school adjust to them.

CHAPTER 11

RATIONALE FOR SUPPORT SYSTEM

The preceding chapters have described the content of a program designed to prepare a student to become an elementary school teacher. The scenario has been provided to give this content some meaning so that the reader can visualize the next steps of the overall task, that of putting these ideas into an organizational framework where the program may be tried in real life.

To the end of letting the reader put the following chapters into perspective, it may be useful to reiterate the philosophical assumptions upon which these support system chapters were developed. These assumptions are: (a) an effective program demands that all relevant sectors of the educational enterprise be involved in the development and operation of a teacher training program, and (b) that these sectors must operate in a condition of protocooperation.

Restated this means that the universities, public schools, regional laboratories, government agencies of various kinds, and the industrial elements must actively work together in planning for and operating a teacher training program. Further, if such a teacher training organization is to become viable, it must develop in such a way so that each sector can draw sustenance from its relationship with the others, and would directly benefit from the relationship. Also, each sector should cooperate by delineating its responsibility so that these clear-cut responsibilities can contribute to creating a program which is greater than the sum of its parts.

None of the authors of the Model Program deny the complexity of this kind of proposed organization. Yet, to rely upon the traditional forms of organization is to ignore the potential of new knowledge which has been generated since World War II in terms of systems, organizational management, and man/machine/materials interaction.

The next three chapters are an attempt to set the "field" for an understanding of how those support systems can interact so as to support the instructional program. That is, the condition of the proposed organization can be viewed as having several dimensions; each dimension useful for judging the relationship of the various parts. The reader should keep in mind that the descriptions which follow are not exhaustive. They were developed to put some "handles" on the problems of developing an organization. In the final analysis, each institution must engage systems experts to adequately specify the parameters of the development and operations activities. The purpose of the next three chapters is to provide a discussion of these problems so that appropriate personnel can be engaged.

Rationale for Support Systems

The quantum jump forward for the instructional program implied in this document in terms of greater quantity of materials, more flexible and different kinds of spaces, the acquisition and storage of various kinds of data, more and differentiated contacts with pupils in the public schools, the development and maintenance of individualized student schedules, etc., demands that a greater variety of disciplines be involved, and more resources used for developing and maintaining the program than is traditionally the case.

It is a phenomenon of our technology that as we obtain and apply more knowledge to the development of a product, the development time increases exponentially, and the adoption time decreases accordingly.

In the specific case of the proposed model, it is clear that a wide variety of professional and para-professional skills will be needed. These range from experts in the areas of social organizations that create an environment that can constantly react to inter and intra social pressures to the Production Supervisor who is responsible for capturing on tape or film classroom episodes that effectively illustrate an abstract concept. Further, these systems need to be developed in such a way as to maximize each unit's responsiveness to the task, and minimize the danger that "the tail wags the dog". The danger of a complex organization, especially one comprised of specialists, is that each unit will devote more and more time to sustaining that particular sub-system.

There are several elements which are important in avoiding this danger, and they are discussed in greater detail in Chapter 14. Essentially, these elements deal with the problem of specifying a task from a wide and effective range of alternatives (in short, an open system) providing for communications linkages so that each element can develop a solution appropriate to the task, and appropriately rewarding the participants so that this interactive problem-solving behavior is viewed as being an essential part of the organization (that is, that individuals receive satisfaction from being a part of the organization).

Development of the Program

Given that the system is open and that it is task-oriented, there are two major phases, each requiring a different expertise, that are necessary for a new program. The first phase involves developing activities; the second phase deals with those factors necessary to maintain the operation once it is adopted. Development can be viewed as a series of steps, each requiring overlapping but discrete skills. In a converging fashion, goals must be explicated, and these ideas analyzed in terms of theory and practice. Rationale must be developed from this analysis. From the rationale, a design is created which then leads to those specifications necessary for construction to occur. After the product is created, it must be tested in the field against the specifications and modified if those criteria are not met.

Although in real life these steps are frequently compressed and a few individuals may be able to effectively perform through this range, different skills are usually called for as the development of a project moves from the more abstract delineation of goals to the specific problems of testing and modification. Not only are different skills called for, but it is inefficient as well as debilitating for professionals to be responsible for the "nuts and bolts" of an operation. This is not to imply that the service functions and para-professional skills called for are not as important as the professionals in developing a program. Both the policies and the operation of the organization should reflect this spirit.

Operation of the Program

Once a program has been constructed and tested, it is ready for operation. In the operational phase, the requirements of an effective system preclude, for the most part, the creative activity used in developing the program. For example, in CM-10, the present specifications call for two students to view and analyze video tapes of themselves. It may be found in the testing phase that an even number tends to polarize issues, or that two is too small a number to operate efficiently. Whatever the reason, the professional in charge of the instructional experience element may decide, using both measurement data and personal observation, that he should change the number of students involved in the video tape analysis. If, after consultation with the other team members, it is felt that the same content objective can be reached and measurement instruments would still be valid, it is operationally feasible that the number of students might be changed, i.e., from two to four.

This kind of creative development activity could well be at odds with the system in its operational phase. Once the program is in operation, changing the number of students might interfere with a research design, impose new scheduling problems on the students, or call for equipment configurations which are not possible. While the system must continuously remain open to meet the needs of the participants, it must also operate within prescribed limits so that it can effectively remain flexible. The organizational conditions in which this can occur are discussed in greater detail in Chapter 14.

Summary

Protocooperation is the foundation upon which the support systems are developed. The construct of a system is used because it implies that events, relationships and needs can be specified and facilitated. If technology is to be used in the training of teachers, then it is mandatory that the system be an "open loop" system capable of continuously reacting to the needs of the participants.

Three systems will be viewed in the next chapters: a Program Support System,an Information and Evaluation Support System, and an Organizational Support System. Each system is viewed as a dimension for looking at the same entity: an organization of people dedicated to teaching and learning about elementary school instruction.

The first dimension includes the processes by which a program can be developed and made operational. The steps of development are iterated, and the elements used to develop program content are outlined. The second dimension deals with the concept of information and its use in management, measurement, evaluation, research and dissemination. The third and most abstract of the support systems looks at the conditions under which man works, and postulates those conditions necessary for protocooperation.

CHAPTER 12

THE PROGRAM SUPPORT SYSTEM

In the following two chapters the construct "system" will be broadly used. The reader is urged to accept the term to mean that as many elements of the instructional situation as are needed are taken into consideration, as well as their interdependence when solving problems dealing with the instruction of students. To the extent that it is possible to apply science and scientific findings to problem solving, technology is being applied. To the extent that technology can be used to develop programs consistent with humanistic goals stated in this model, technology will be used.

In using the construct "instructional system" it is important to make the following distinctions as explained by Dale Hamreus:

> "One additional and perhaps least understood distinction of a system should be briefly discussed. The elements of a system are not the real entities with which to be concerned in a systems approach to instructional development: rather it is with the order among the properties (qualities or states) of those entities. In other words, it is not the learner in instruction but the current characteristic or condition of the learner which is the entity in the system. It is not the condition of learning but the quality or state of those conditions. Similarly, the learning process is not the conditions and the learner in the system but the quality of those conditions and the state of the learner. This distinction between entities and properties of the entities in a system seems to be a difficult one to maintain but it is a very important one." (60)

It is only by recognizing that there is a difference between the structure of an organization and the effect of an organization that it is possible to develop the kind of protocooperative condition which is deemed necessary for the implementation of the model program presented in this report. Such a condition coupled with the latest systems of science and behavioral technology should make possible a teacher training program with a potential for exponential increase in effectiveness. It should make possible a program that can develop teachers capable of dealing with problems to be faced in the immediate future as well as those that will be faced at the turn of the century.

Rationale

The rationale for explicating the program support function can be stated simply: the use of an instructional systems approach provides a potential power that permits human factors to be enhanced and the use of automated, mechanical, or other procedures where they can be more effective than conventional procedures. "A systems approach provides not only the means for systematic planning, designing, organizing, and controlling the development of instruction but then builds upon that which has been found to work best and eliminates those parts which contribute least or negatively to the desired goals." (60)

As increased knowledge of the experiences that are judged useful by those who are designing and learning modules is obtained and used, the complexity of providing a rich learning experience for the student increases. This increased knowledge is coupled in turn with a growing social awareness as to the role that an adequate or inadequate education can play in terms of an individual's future role in society. Pressure is clearly on teachers of teachers to provide the widest possible range of learning alternatives for insuring the best education possible.

Further, new communication tools exist which allow for new kinds of training procedures. Even a decade ago, for example, it would have been unusual for a student teacher to have the kind of precise feedback available for self-judgment that the portable video tape recorder provides. Yet today, the use of such a tool is commonplace.

Given that there is more to learn and that there are new tools to use in this learning process, it becomes a professional obligation to make the instructional process as efficient as possible, and to capitalize upon the innate drives to learn that students possess, but are often not nurtured. Further, it is suggested that what satisfies the sophisticated learner (the instructor) may be very different from what satisfies and is of interest to the naive learner (the student). What is needed are behavioral technologists that can interact with and operate under the conditions imposed by practitioners in the field so that the teacher education program can be functional and exciting for all participants.

Participants as used in this context refers not just to the student and an instructor balanced on the legendary Hopkins log; a realistic and necessary view of participants in this context must take into consideration all of the elements involved in the program. For example, in the description of Module CM-10 "Analysis of Teaching Styles of Self and Others" there appears an estimated student time of 25 hours, only 11 hours of which are spent with an instructor. The module is designed so that the student spends the major portion of his time in individual planning and in interaction with people other than instructors. Included in this interaction are contacts with peers, contacts with teachers in the public schools, contacts with pupils in the public schools, contacts with resource personnel in the instructional materials library (both for information and for service) and contact with someone or some machine which provides evaluative data.

There are at least a dozen contacts in addition to the instructor contact that are essential in making this module a success. For example, if the clinical teacher does not support the student in providing pupils for a micro-teaching lesson, if the maintenance element has not provided the video tape recorder and other equipment, if the librarian cannot provide the materials for the student to use in planning and teaching the lesson, etc. the student is likely to receive far less than an optimum learning experience. It is necessary to design, instruct, and test a module such as Module CM-10 within a condition of protocooperation; a condition that is typically not a part of the experience of clinical teachers, university professors, and students so that many elements can function well together.

Stages of Program Development

The stages of program development progress from the abstract to the specific as represented in Figure 12.1. One level of abstraction, at the point of module design, might involve stating that teachers shall be aware of cultural differences related to learning styles. A much different level of abstraction, at the point of module construction, exists when the behavioral objectives state that the student will be able to identify and use in conversation 50 vocabulary words which are unique to an ethnic group.

Further, if five ethnic groups are used for examplars in this instructional experience, it is reasonable to assume that films or tapes would be a more efficient means of instruction than live field experience. Subsequentially a production team may be involved from either the regional laboratory or from the film industry to prepare these materials. As an aside, it can be pointed out how in this instance the conditions of protocooperation might exist. First, it is assumed that industry has an interest in developing carefully prepared materials which have been tested in the field. In this case the university, public schools, and industry would work together in developing the instructional objectives and specifying the instructional experiences and materials that would lead to the realization of the objectives. The film industry clearly could draw sustenance from the planning done in conjunction with other sectors of the educational enterprise. Universities and public schools would clearly benefit in this example from the production skills of the film producers. Once the materials have been developed for this program, then it is assumed that they could be marketed to other educational institutions for similar or even additional instructional purposes.

The stages of development are the main points to be considered in this section. What follows, therefore, is an attempt to differentiate the elements of responsibility in order to provide the reader with the parameters of a program development system. These elements cut across the five phases shown in Figure 12.1 (Program Design, Component Design, Module Design, Module Construction, and Module Testing). As suggested by the example above, the nature of the resources needed for the various steps shifts considerably as the program moves from the design step to the stage of adoption.

Stages in the Development of Instructional Modules

Figure 12.1

Program Design	The overall conceptual scheme based upon broadly identified goals and values.
Component Design	The isolation of conceptual areas for the purpose of developing specific goals.
Module Design	Articulation and refinement of goals into clusters of objectives; illustrated by suggested trainee behaviors and possible instructional experience.
Module Construction	Specification of behavioral objectives, design of instructional episodes, design of measurement instruments, specification of operating conditions, design of instructional materials.
Module Testing	Field testing the instructional units to see if appropriate behavior changes occur; modify module(s) (if necessary) to meet specifications.
Tested Module(s)	A unit of instruction that may need to be modified as conditions change but at this time seems to function well to facilitate student attainment of objectives.

Elements of Program Development

After the major conceptual units of the program are isolated and a rationale has been developed for each (component design), the next step is module design. The elements of module design consist first of the further refinements of goals into sub-goals and the analysis of their relationship in terms of sequence and inter-relationships which result in instructional objectives. Second, and equally important, is the specification of how these objectives might be realized on the part of students. The instructional experiences will vary, depending upon the complexity and level of achievement called for by the content specialists, from either the very simple (e.g. read and recall) to the very complex (application of skills, knowledge and feeling states in real instructional decision-making in the elementary school such as called for in Module CM-11 through CM-16). In many modules instructional materials must be adapted or developed to meet the needs of specific instructional experiences. Appropriate instructional materials become an essential part of an instructional experience.

Two other elements must be considered during the design phase, although functionally they consume greater resources later in the development of the program. These are the measurement and maintenance elements. Measurement refers only to that function which proposes to provide feedback data necessary for an individual to perform a particular function. A clear distinction is made between measurement (the acquisition of adequate data) and evaluation (the use of that data in making value judgments). The major input the measurement team members would provide in the design phase would be that of insuring that the instructional objectives are stated in such a way as to make measurement, and thus subsequent evaluation, possible. Chapter 13, "Evaluation and Information Support", discusses this element in greater detail.

The fifth element is maintenance. The maintenance element is primarily concerned with the logistics of instruction. In this capacity it functions to provide the services and clerical support which are necessary to sustain the total program. Service functions would account for the specification and ultimate purchase of various supplies and equipment needed for fulfillment of program objectives. The maintenance element would also be responsible for coordination of the facilities of the Facilitation Center (of the self-directed component) with the facilities of the Learning Resources Center.

The Learning Resources Center is viewed as providing the student with a living-learning environment. Tools, resources and spaces designed for interaction of a variety of types called for in the program could be considered as an essential part of this complex. This would be a facility where students and faculty could go to study, to preview, to view or review stimulus materials.

The Learning Resources Center should not be viewed by the reader as the Facilitation Center even though they may be physically located in the same complex, and may share a common source of materials and supplies. The function of the Facilitation Center is essentially that of process; communication between and among students and faculty, advisement of both a personal and vocational nature, and the creation of an environment wherein the student feels free to express himself in interaction with others. The Learning Resources Center will functionally converge with the Facilitation Center by providing spaces, materials, and other resources which are necessary for the student to become a self-directed learner.

In the Learning Resources Center there should be plentiful non-book materials such as film, video and audio tape, and computer consoles. Simulation and gaming materials would also be housed within such a center. The maintenance element would also be concerned with the staffing of support personnel necessary for the use of these facilities. This could include such people as projectionists, technicians, computer programmers, material design and production specialists, etc.

Implementation Steps

What has been described thus far has dealt with the assumptions and procedure used in creating a theoretical model of a teacher training program. No claim is made that the modules described in the preceding chapters are exhaustive or even completely designed. Due to the unique character of each adopting institution modules will be expanded, compressed, eliminated or totally new designs created. It is essential that each institution examine the proposed program and component design in light of their own value structure.

Once the design step is accomplished there remain two other steps prior to operation. First, the program parts must be constructed and then they must be tested under real or simulated adoption conditions so that they can become an operating program.

Figure 12.2 indicates the sequence of steps that lead to the design for a module. Figure 12.3 depicts the steps that lead from program design to the development of specific tested modules within the program. Decision blocks appearing under the five elements in the "test module" step in Figure 12.3 represent evaluation; that is, a value judgment about the module that is being tested.

The margin of error that is acceptable to the program development team will to a large extent determine the amount of resources that need to be put into the testing of the program modules. The complexity of the content objective and instructional experiences are also major factors.

What should be pointed out, however, is that if valid and reliable data are not used for evaluating the worth of the program modules, then considerable damage could occur to the individuals and institutions involved. The advantage to the typical teacher training program that never asks the question of worth, is that the program is likely to be loose enough that a student can learn in spite of the system. If, on the other hand, the system is effective in teaching, but what is being taught is bad, then the teacher of tomorrow and his students suffer. Hence: (a) the deliberate distinction between measurement and evaluation, (b) the specification that the system must be constantly open, and (c) the specification for testing each module.

Operation

Figure 12.4 indicates how the program support system would function after each module had been designed, developed, and tested. Although the processes specified in Figure 12.3 are necessary, they are far from sufficient. For example, it is possible that a tested module may be operating effectively, fit sequentially into the component, and yet still not occur soon enough in the total program to provide some students with necessary prerequisite skills. Although in one sense this is a question as to whether the module is functioning in the program, it is clear that it is not a module *qua* module evaluation question but one of system operation. Evaluation criteria for this level of judgment call for different kinds of data collection and different analysis procedures. These are discussed in Chapter 13 as part of the "Information and Evaluation Support System."

Figure 12.4 shows a tested module that is assumed to be operating in the program. This module has been tested under simulated conditions or under conditions different from actual program operation. It was also tested with students who are different from students currently experiencing the module as it operates in the actual program. Thus, the question must be asked, "Is the module functioning in the program now that the program is operational?" In order to answer this question two prior questions must be answered: (a) "Is the module still functioning as a module?", (b) "Is the module functioning within the scope and sequence of its component?" A *no* answer to any of these questions would require analysis. If measurement data can be generated that leads to an evaluation of why the module is not functioning, the program support system would use this evaluation data to redesign and/or reconstruct the module and then test the reconstructed module.

A second function of the program support system during the operational phase would be that of maintaining the Learning Resources Center and thus making the facilities of that center available to support the flexible instructional demands of the proposed model program. Some dimensions of the complexity of that task are briefly discussed below. If, for example, a large number of students in the program simultaneously elected to take a given module at the same time, then space, materials, and faculty must be available to support that student load if the program is to remain self-paced. On the other hand, if the students spread themselves out among modules at any given point in time during the program,

Figure 12.2 Steps Leading to the Design of a Module

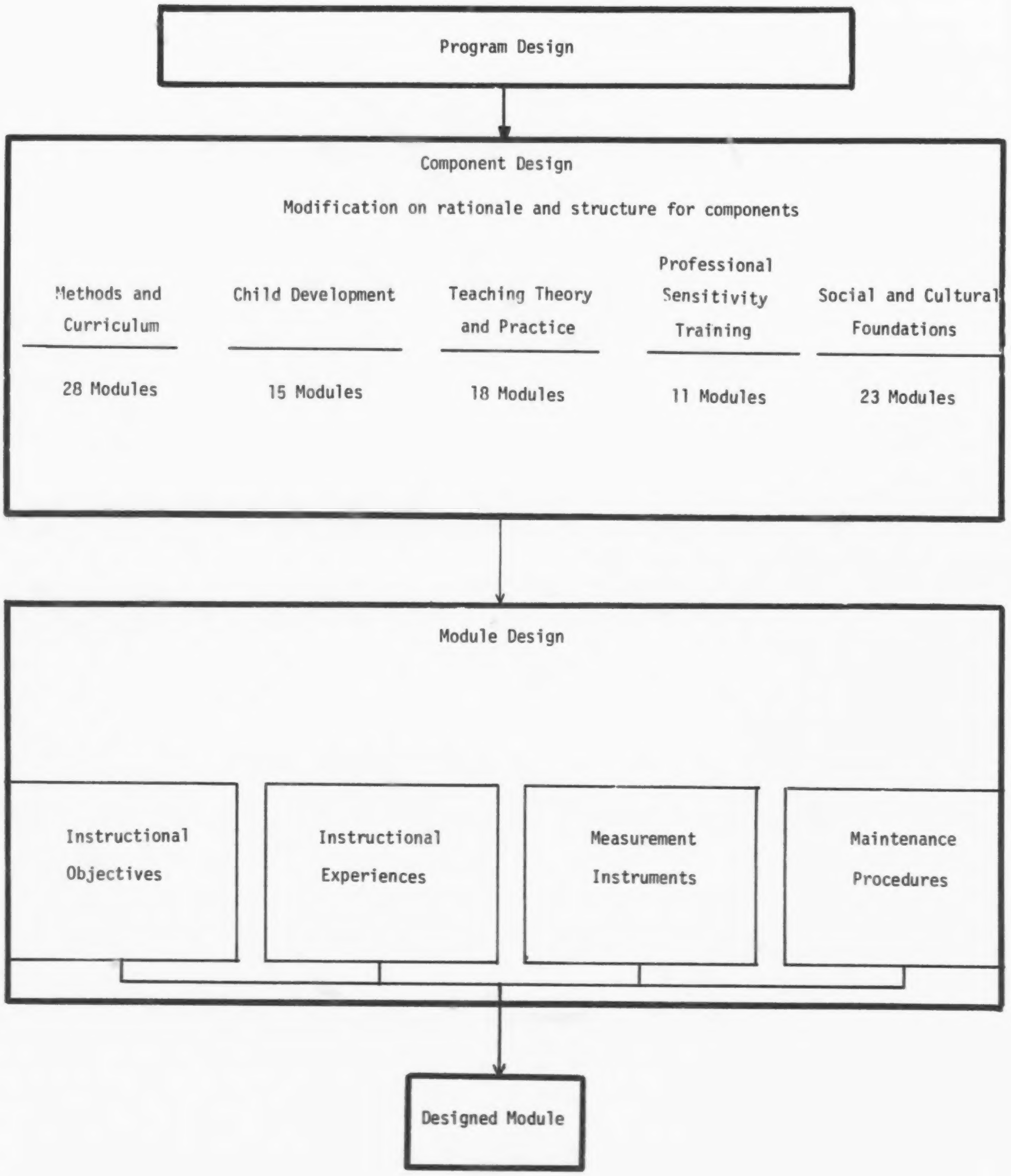
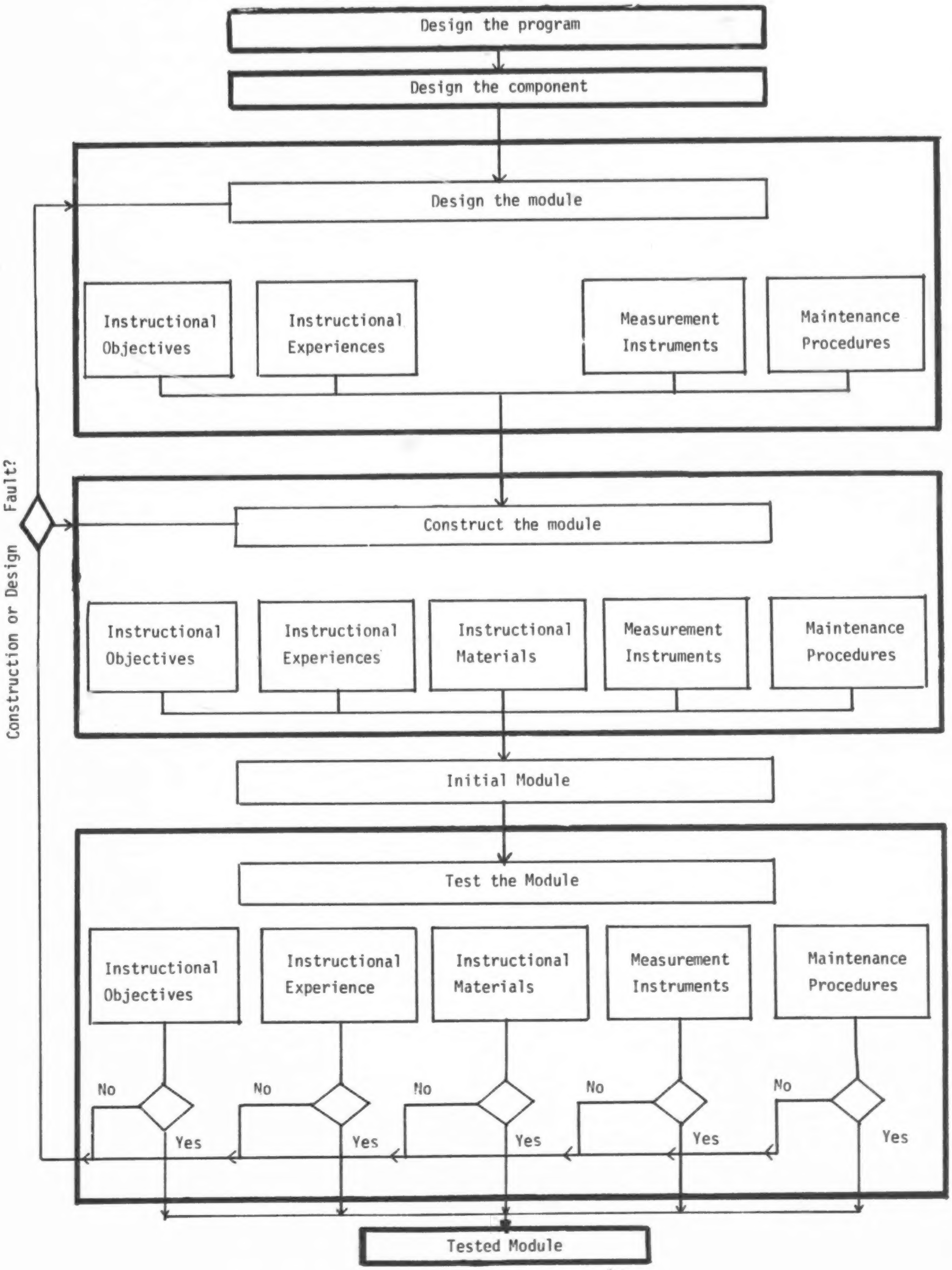

Program Design
Component Design
Modification on rationale and structure for components
Methods and Curriculum
28 Modules
Child Development
15 Modules
Teaching Theory and Practice
18 Modules
Professional Sensitivity Training
11 Modules
Social and Cultural Foundations
23 Modules
Module Design
Instructional Objectives
Instructional Experiences
Measurement Instruments
Maintenance Procedures
Designed Module

Figure 12.3 Steps Leading to the Development of a Tested Module


Design the program
Design the component
Design the module
Instructional Objectives
Instructional Experiences
Measurement Instruments
Maintenance Procedures
Construction or Design Fault?
Construct the module
Instructional Objectives
Instructional Experiences
Instructional Materials
Measurement Instruments
Maintenance Procedures
Initial Module
Test the Module
Instructional Objectives
Instructional Experience
Instructional Materials
Measurement Instruments
Maintenance Procedures
No
Yes
No
Yes
No
Yes
No
Yes
No
Yes
Tested Module

Monitoring, Evaluation, and Re-design System
for Tested Module

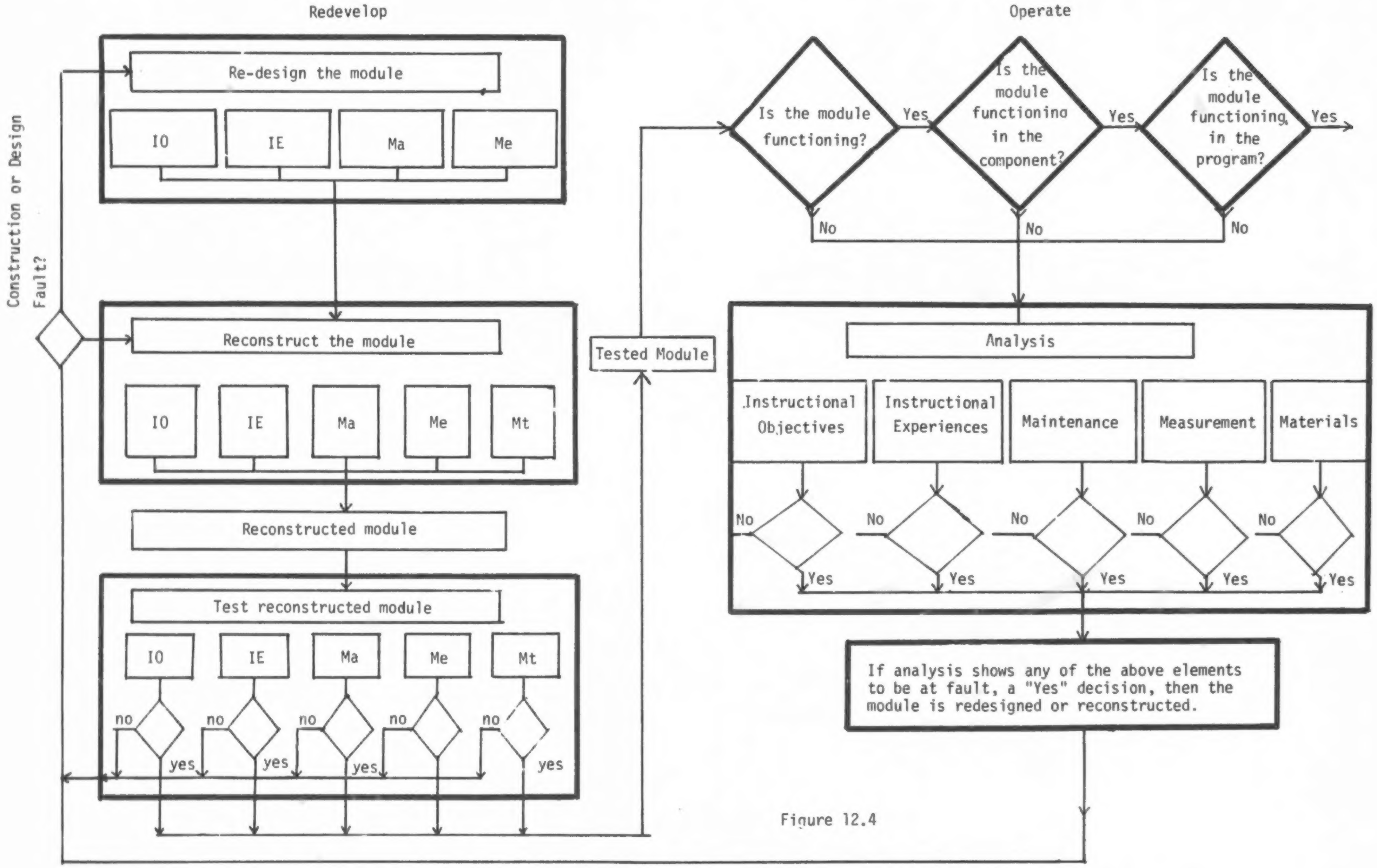

Redevelop
Operate
Construction or Design Fault?
Re-design the module
IO
IE
Ma
Me
Reconstruct the module
IO
IE
Ma
Me
Mt
Reconstructed module
Test reconstructed module
IO
IE
Ma
Me
Mt
no
yes
no
yes
no
yes
no
no
yes
Tested Module
Is the module functioning?
Yes
Is the module functioning in the component?
Yes
Is the module functioning in the program?
Yes
No
No
No
Analysis
Instructional Objectives
Instructional Experiences
Maintenance
Measurement
Materials
No
Yes
No
Yes
No
Yes
No
Yes
No
Yes
If analysis shows any of the above elements to be at fault, a "Yes" decision, then the module is redesigned or reconstructed.

Figure 12.4

then demand for each of the various kinds of support would also be spread out.

Scheduling requirements have direct implications for the variety of instructional materials and instructional spaces that would be required under such a condition. Estimates of the number of individual learning carrels needed must be based on an estimate of how completely the carrels would be used. For example, if 12 hours per day, seven days a week use is assumed in estimating the number of carrels needed, not only will the total time required for all students to complete a given module or set of modules be reduced, but also the demand to fit the individual student into a use-schedule will be increased.

At certain points in the program, the need to serve all students within a fairly short period of time occurs, brought about by the specifications of certain concurrencies and prerequisites which cut across component lines. The situation could arise in which the program, could be held up if facilities were not provided which would enable efficient and rapid progress through a given set of modules.

Given these complicating factors which enter into program requirement estimates, a general picture of the kinds of requirements which are predicted for the proposed program follows, thus giving an example of the complexity of requirements that can only become known through simulation of the program or trial implementation.

Spaces and Facilities

The two most often used types of instructional space (excluding field experience spaces) are: (a) seminar rooms, (b) learning carrels.

The seminar rooms would generally serve groups of eight to fifteen students. The primary instructional mode for these spaces is group discussion, however, some role playing interaction and mediated lectures are also specified. Module activity specification in many cases suggests that seminar rooms should have either built in or available to them overhead projection equipment, a film projector, and video tape equipment.

Learning Carrels. These instructional facilities fall into two types, both fully-mediated individual learning carrels and mediated small group learning carrels. Generally, individual learning carrels are specified where training requires the use of programmed instruction with adjunct media such as slide/tape presentations and short films. The small group carrels in general provide space for self confrontation activities in a small group setting that would utilize, for example, a video tape recorder. Certain modules call for observation and the use of observational analysis techniques in small group carrel experiences prior to actual field experiences. An additional requirement of these small group carrels would be the installation of video tape equipment. Installation of this equipment should probably be such that it can easily be removed and used elsewhere when not needed in the carrel itself.

Materials. The most frequently specified medium has been that of video tape. In many instances where video tapes have been called for in a module, film may be more appropriate. Specification of the appropriate medium is a problem of the development team at the construction step where message design becomes a critical factor. It is expected that both video tape and film will be used, each applied where it is most effective. efficient. and economical. Though production costs would probably be higher for film, costs would be lower in both playback equipment and raw stock for copies. If, however, a playback system utilizing a dial access or some other retrieval method were used, thus eliminating the necessity of having an individual playback unit for each student in each learning carrel, fewer playback units and fewer copies of materials would be needed. Whether the cost of setting up the retrieval system itself would be as expensive as individual playback units is another question that the adopter must study along with other such utilization factors as convenience of use by students, maintenance, personnel required to operate the equipment, etc.

Protocooperation and the Program Support System

If progress in teacher education is to be realized, then public schools and universities and colleges, the educational industry and the regional laboratories need to cooperatively review their purposes, functions, roles, and responsibilities. By working together as professional equals, old roles in the teacher education program will by necessity be redefined and new roles developed. A perfect partnership relationship requires responsibility and participation of each of the partners commensurate with the degree of involvement. Partnership assumes that the schools, universities and colleges and the producers of educational materials have the resources, ideas, people and material that can improve teacher education.

A structure, then, needs to be created which will insure collaborative relationships on an equal professional partnership basis. Mutual respect and endless contact will be necessary for the creation of such a relationship. Public school personnel (administrators, clinical teachers, and clinical professors), professors of education from the colleges and universities, and people from the educational industries and regional laboratories need to be involved initially and deeply in the planning. In such initial planning sessions, the potential of the program will need to be explored as well as the benefits which will accrue to the various participants.

The development of such a structure raises questions such as the following: (a) What areas of responsibilities can best be assumed by each?, (b) What roles need to be created and how explicitly stated should they initially be?, (c) What appropriate financial commitment needs to be made?, (d) What will be the nature and amount of supervision and assistance provided the student by the university and public school personnel?, (e) What professional qualifications are necessary for the personnel involved? (again, both in the university as well as the public school and industy)?, (f) What administrative arrangement needs to be identified and established?, (g) What kind of information needs to be gathered about the on-going program to facilitate coordination and optimum functioning?

Such a collaborative organization must: (a) establish guidelines which can be developed into operational policies and regulations, (b) develop guidelines for instruction and supervision in the field phases of the instructional module, (c) develop guidelines for the establishment of continuous evaluation and review of existing operational policies, (d) develop guidelines for coordinating the inservice training of public school, university and industrial personnel associated with the program, (e) develop procedures which will facilitate the appropriate scheduling of students to instructional activities, (f) develop guidelines which will foster experimentation and research in the experimental phases of the program and develop effective dissemination and training procedures so that the research and practice findings of this program can be considered by other teacher institutions. These considerations and others are discussed in greater detail in chapter 14 which deals with the organizational support system.

Summary of Program Support System

Five elements of the program were described. These elements would operate at various levels of importance and intensity throughout the five steps of program development, and would continue into the program operation for the purpose of maintaining an open system. These five elements were: (a) instructional objectives, (b) instructional experiences, (c) instructional materials, (d) measurement, and (e) maintenance. Six steps were described for developing the program modules, these were: (a) design, (b) construction, (c) testing, (d) evaluation, (e) modification, and (f) retesting. These steps move from a very abstract statement of philosophy and rationale through the more concrete explication of these goals at the specific level of building and continually modifying the program. After the program is adopted by an institution the six elements become useful in governing the system in such a way as to allow the program to respond to changing conditions and new knowledge in the years to come.

CHAPTER 13

INFORMATION AND EVALUATION SUPPORT SYSTEM

It is important to clarify the terminology used in the chapter heading. Holding to the function of these chapters, that is, to provide the reader with a way of looking at a task-oriented organization dedicated to improving elementary school instruction, there are two concepts which are useful in providing the reader with a different view. The first of these is information and the second evaluation. Information is defined as the knowledge derived from the analysis of data. Data may include facts, principles, statements, or other material upon which arguments are based, but the term data usually is defined as a magnitude figure, a relationship to be introduced into, or to be derived from the operation of a system.

Evaluation is the process of applying values to information, i.e., how knowledge is used. Later in this chapter a distinction will be made between the acquisition of data for instructional purposes, measurement, and the process by which that data can influence actions within the program evaluation. As will be pointed out there is no doubt that a much greater variety and new kinds of data will be needed for the proposed form of instruction than is the case in the typical elementary education program. The use of modules and a protocooperative organization demand new types of data and a more sophisticated use of them.

Instructional Management

All of the operations implied in this model underscore the necessity of establishing an instructional management system. Although it might be feasible to operate such a system without computer monitoring, the kinds of information needed quickly and in detail by a variety of participants; teachers, programmers, students, clinical professors, support personnel, etc., make it unlikely. Computer based instructional management systems are currently in development, although this obviously represents a challenge which industry is perhaps best equipped to handle. That an instructional management system is feasible is witnessed by the fact of its operation in a public school setting with regular public school teachers. (121) The use of an evolutionary, flexible, and practical instructional management system of the type described by Silberman is what is required if the program is to function so as to achieve its goals.

The system needs to be evolutionary in order to be able to handle the various components of the program in their development. As the modules change from essentially uni-level group-paced activities to multi-level individually-paced activities the system has to be able to respond to the change without major redesign.

The system design must be flexible. This calls for a general-purpose time-shared data management computer program. Such a computer program is within the capability of industry and most higher institutions to develop, and would allow the teacher education program to be evaluated and revised without major reprogramming. As the various parts of the elementary program become crystallized, more specialized systems can be developed.

The system has to be practical. If the elementary teacher educators are to utilize the system, it must require minimal training and cost. The system must use an easy-to-understand inquiry language, and it must not require hardware that is prohibitively expensive.

To summarize, the main features of the instructional management system are, in Silberman's words,

> ".....the regular testing routine; the constant focus on instructional objectives; the extension of the teacher's memory of available materials and activities appropriate to given objectives, and the systematic application of the diagnosis-prescription cycle to individual learning problems. These features should all combine to prompt teachers to demand instructional materials that are guaranteed to facilitate achievement of specified learning objectives." (121)

The Necessity for Evaluation

It would not be an exaggeration to state that empirical knowledge on teacher education is in a woeful state. Except for an occasional follow-up of their graduates, teacher training programs have for the most part not been concerned with evaluating their activities. Wallen and Travers (135) note that the "most widely advocated teaching methods are based either in philosophical tradition or on the personal needs of the teachers." Travers (135) has been even more devastating. He points out that "sometimes it can be suspected that most university curricula represent simply a set of topics about which faculty like to talk."

Such a condition can no longer suffice in teacher education. In Suchman's words,

> "All social institutions, or sub-systems, whether medical, educational, religious, economic, or political are required to provide "proof of their legitimacy and effectiveness in order to justify society's continued support.....The current desire to judge the worthwhileness of such programs is but one aspect of modern society's belief that many of its social problems can be met most efficiently through planned action based on existing knowledge, including the design of better solutions in step with advancing knowledge....institutional reform rather than individual changes in behavior offers the

better prospect for attacking these social problems."
(132)

What Suchman is in effect saying is that a social activity like a teacher education program must demonstrate rather than assert its worth. Others are in essential agreement with such a position, Schutz (116) Sorenson, (130) Stufflebeam, (131).

The quality of a teacher education program will reflect the soundness of the decisions that are made about available alternatives. The evidence indicates that in the past, decisions about teacher education have been made not on the basis of relevant information, but rather on personal experience, tradition, and authoritative opinion. If the decisions in a teacher education program are to be based on reliable and valid data, there must be provision in the program for the availability of such data. In short, assessment and measurement must occur before, during, and after the implementation of the program and each sub-system of the program. The results from the assessment and measurement have to be judged as to their worth and then fed back into the system. In addition to the questions posed at the beginning of this section, the program developers have to be able to answer such questions as: Which parts of the program are successful, and which are not? Which behaviors appearing at one part of the program reappear at a later part, and which do not? Which behaviors are learned by the students at an intellectual level but not translated into teaching behaviors? The information needed to answer these and other questions exemplifies the necessity for considering evaluation as an integral part of a teacher training program. The Information and Evaluation Support System has important implications for the improvement of the Model Program it develops and becomes operational.

Measurement and Evaluation

Every module of each component specifies at the minimum a pre-assessment and post-assessment. Not all of these measures are necessarily tests; they range from written reports and essays to behavioral assessments. However, the use of tests and testing is heavily ingrained in the program, and these instruments have to be developed. Thus, the construction of tests will also be one of the important developmental elements of the program, and the tests will themselves require the development-evaluation-revision cycles that characterize the program.

Since the tests will be used for several different purposes in the program modules, a number of different types of tests will have to be constructed depending on the particular module. Some modules will require simply a pre-test and a post-test instrument, others will use tests for placement, for diagnosis, or for testing out of a module.

It is important to point out the distinction between measurement and evaluation. Measurement refers to the use of instruments for the purpose of obtaining data concerning the status of behavior or change in student behavior. Subsequently, measurement instruments that are developed from the instructional objectives serve only to indicate whether student behaviors as specified in the objectives have been made manifest.

Evaluation is a judgment of worth or an appraisal of value. The procedures suggested in the following pages have as their purpose the development of information on which an evaluation can be based. Evaluation is concerned with the processes of generating accurate and relevant information of many kinds from which interested individuals can make a judgment.

A variety of information will be required in order to answer a number of questions that cut across the various program components. The information needed to answer the following questions would seem to be most relevant.

1. Are the students of the program effective in promoting pupil achievement?

2. What are the instructional behaviors that characterize the students?

3. What knowledge and skills do the students possess at the completion of the program?

4. What do the students in the program learn in the modules and in each component of the program?

5. What kind of individuals enter the program?

6. What are the differentiated effects of program activities on different kinds of students?

Many of these questions, particularly Question 1, cannot be satisfactorily answered during the developmental phase of a program, since necessary data will not be available until students have completed the program. Question 1 is listed principally to bring into focus the ultimate aim of any teacher training program and to stress the fact that all other information yields only proximate criteria of the effectiveness of a program.

How then can a developmental program be meaningfully evaluated? Scriven's (117) distinction between formative and summative evaluation is relevant at this point. Formative evaluation describes the evaluation of an education program that is in various stages of development. Summative evaluation, in contrast, is concerned with the evaluation of a developed or completed educational program. It is important to distinguish between the goals of these two roles of evaluation. Formative evaluation aims to bring about an improved educational program, while summative evaluation results in a set of descriptions about a single program or the relative merits of alternative or competing programs.

It follows from Scriven's distinction that, since the model program involves a developmental activity, formative evaluation is the more appropriate strategy. Formative evaluation will provide the means by which intelligent changes can be made in the program. Summative evaluation will of necessity be of lesser importance during the developmental phase of the program. However, as the various elements of the program become crystallized over the course of time, summative evaluation can play a more important role. It is likely that during the intermediate aspects of the program, summative evaluation strategies can be applied in deciding between two alternatives. For example, the question may arise whether a given module is better accomplished through live or mediated presentation. The strategy appropriate for answering such a question could involve all of the usual trappings of a conventional experimental design, and the results would yield a set of descriptions characteristic of summative evaluation. For the most part, however, the evaluation strategies and the concomitant measurement, assessment, and research activities of the Program in Elementary Teaching will focus on the formative role of evaluation.

A Model for Evaluation

According to Stufflebeam (131), the evaluation of an on-going program can be regarded as process evaluation. "The objective of process evaluation is to detect or predict, during the implementation stages, defects in the procedural design or its implementation." The requirements of a process evaluation cannot all be specified a priori, since its purpose is to assist program personnel to make more rationale decisions in order to improve the quality of the program. Some of the theoretically relevant variables can be specified, but many data have to be gathered in process, and will include unforeseen events which may be important.

The overall model of the Information and Evaluation Support System is depicted in Figure 13.1. A set of feedback control loops shows the relationships of the evaluations at the module level, the component level, and the program level. The conceptualization of the process and decision functions of the evaluation have been freely adapted from Stufflebeam (131).

In Figure 13.1 the symbols at the left show module activities; the center symbols show component activities, and the symbols on the right, program activities. Each grouping of symbols contains a set of blocks which indicate the major evaluation functions.

Block 1 shows the activities within a module. It is at this level that the need for changes in the program will be detected and within which the changes will probably take place. All the module's inputs, e.g., students, materials, staff, organization, etc., and the modules's outputs, e.g., student performance, are included.

Below Block 1, the circle signifies the systematic collection of information. This information for the most part is collected at the module level, and is needed for the later decisions at all levels. Some of this information has been gathered prior to entrance in the program, e.g., the entrance information required by the college or university from its applicants. The information represented by the circle will include input or presage variables such as measures of the student's cognitive functioning; process variables such as the student's interactions with pupils; and product variables such as the repertory of teaching skills or strategies the student can command.

Block 2 signifies the organization of information. Information would be coded, processed, stored, and retrieved as needed. For example, a module involving micro-teaching might be coded according to Flanders' system of interaction analysis; the data would then be keypunched and filed; at a later time they would be retrieved in order to compare them to the performance of the students in a different micro-teaching situation or a macro-teaching module.

Block 3 refers to the analysis of information that was organized at Block 2. Depending on the decision that has to be made, the analysis will be reported to those involved at the module, component, and program levels.

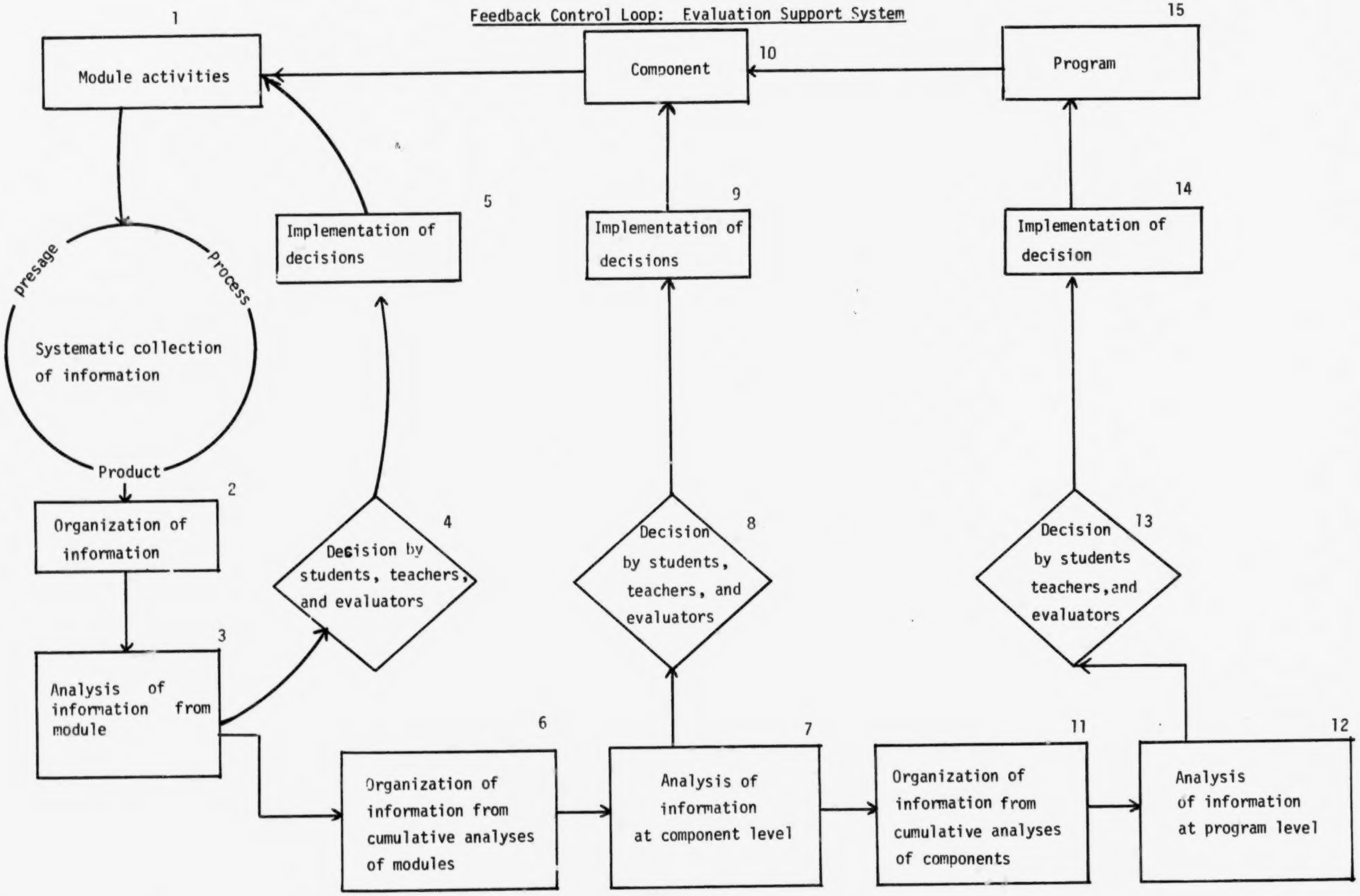
Symbol 4 represents the decisions that are made at the module level. These decisions concern at least three audiences -- the module staff, the students in the module, and those others involved in the evaluation. One of the unique features of this model is the participation in the processes of decision-making by the students affected by the decisions. This aspect of the program is elaborated in more detail below.

Block 5 signifies the implementation of the decisions made at Block 4. At this block, the cycle is reactivated with modification of the module activities at Block 1. The cycle is continuous.

Going back to Block 3, the analyses that occur at the completion of each module would be organized at the component level, Block 6. The information from the different modules within a component would be collated and then analyzed at Block 7 to identify the strengths and weaknesses of the component and to determine whether the modules were sequenced properly. Actually, since most of the components involve a time span of three or more years, the activities in Block 7 might be thought of in terms of sub-components, e.g., the junior year, the senior year, and the resident year or pre-professional, professional, and resident year experiences. The component staff would use the information to evaluate the difficulties and problems in order to make decisions, symbol 8, about the total component or sub-component. These decisions would then be implemented at Block 9. The decisions implemented at Block 9 would affect the total component at Block 10, reactivating the cycle at Block 1.

Figure 13.1

Feedback Control Loop: Evaluation Support System


1
Module activities
presage
Process
Systematic collection of information
Product
2
Organization of information
3
Analysis of information from module
4
Decision by students, teachers, and evaluators
5
Implementation of decisions
6
Organization of information from cumulative analyses of modules
7
Analysis of information at component level
8
Decision by students, teachers, and evaluators
9
Implementation of decisions
10
Component
11
Organization of information from cumulative analyses of components
12
Analysis of information at program level
13
Decision by students teachers, and evaluators
14
Implementation of decision
15
Program

Returning to Block 7, the evaluations from the various components would be channeled to the program level. This information would be organized at Block 11. The components then could be analyzed and their emphases could be examined in terms of the total program at Block 12. Decisions about the various components would be made at the program level at Symbol 13, and the implementation of such decisions at Block 14 would affect the program at Block 15, the various components at Block 10, and the modules at Block 1, reactivating the cycle.

In summary, Figure 13.1 portrays: (1) information for evaluation at the program, component, and module levels will be for the most part collected at the module level; (2) this information will be the means by which the decisions at the program, component, and module levels are made; and (3) the evaluation strategies must be explicated and coordinated so that module, component, and program decisions will have an adequate information base.

Schutz (116) has suggested that one way of conceptualizing models such as the one represented by Figure 13.1 is to follow the analogy provided by the annual modifications of the Volkswagen to improve its performance. Such an analogy can readily be applied to the model and involves the convergent iterative methodology depicted in Figure 13.1. The continuous sequence of trial-revision interactions is aimed at the successive elimination of defects in the program and an increase in its effectiveness. As Schutz points out, such a procedure "provides an assurance that the changes introduced cumulate in improvement and avoids expensive unevaluated modifications which fail to improve overall performance."

The Monitoring Model

While the processes portrayed in Figure 13.1 specify the evaluation of the program, a component, or a module, they do not indicate how individual student progress will be monitored. In Figure 13.2, the model for individual student evaluation is depicted.

In the center of Figure 13.2 is the block representing the pre-test or pre-assessment for a given module. On the basis of this pre-test performance, an assignment is developed. If the level of performance on the pre-test is such that it indicates the student may be in possession of the competencies to be developed by the module, he would be assigned to the module, only some aspects of the module, the post-test or, in some cases, to the next module. The differentiation of module assignment on the basis of pre-test performance will require the development of different types of pre-tests for each module, i.e., placement, diagnostic, equivalency, etc.

The varying pace of the students to complete a module is reflected in Figure 13.2 by the broken Block.

For modules in which there is a separate post-test, i.e., as distinct from the final performance criterion of the module, the student is assigned the appropriate test and upon satisfactory performance on the test begins a new cycle. Should his test performance be less than adequate the students can be recycled or be provided with diagnosis and remediation and then recycled. Performance records are gathered at various points throughout the process, synthesized and fed to the student or a professional staff member for monitoring student progress. Synthesized data is stored, and becomes the data used in program evaluation as shown in Figure 13.1.

In summary, Figure 13.2 portrays: (a) the various evaluation or decision points concerning an individual student's progress within a module; (b) the information needed to serve as the basis for evaluation; and (c) the recording of the information that will be used in the evaluation of the students, the module, and the component and subsequently the entire program.

Taken together, the processes described in Figures 13.1 and 13.2 necessitate a rather sophisticated system of data storage and retrieval not currently found in the typical teacher training program.

Evaluation Strategies

Earlier it was noted that developmental programs require formative evaluation. However designs for formative evaluation are just emerging. In Schutz's words,

> At present, formative evaluation methods have much the same status as the invisible needle and thread used by tailors in the "Emperor's New Clothes." For a variety of social, political, and economic reasons, educational researchers have derived satisfaction in viewing their efforts as contributing to educational improvement. But the inescapable fact is that reliable ways of effecting educational improvement have yet to be identified either by researchers, manufacturers, or school personnel. (116)

For this Model Program, Mitzel's (95) model for teacher effectiveness appeared to be particularly relevant. Mitzel has proposed an evaluation strategy that requires presage, process, and product measures. The most complete evaluation of the Model Program would be obtained by relating the conditions antecedent to the program to the processes that describe the program and in turn relating the processes to the effects of the program. Information at all three stages is necessary to get a clear picture of the program, for, as Soar (128) points out, the overlap between the variable from any two of the stages is no more than about 15 per cent, and more likely closer to 10 per cent. Since it is unlikely that the 15 per cent overlap between presage and process variables is the same as the 15 per cent between process and product, an evaluation

A Model for Monitoring Student Progress

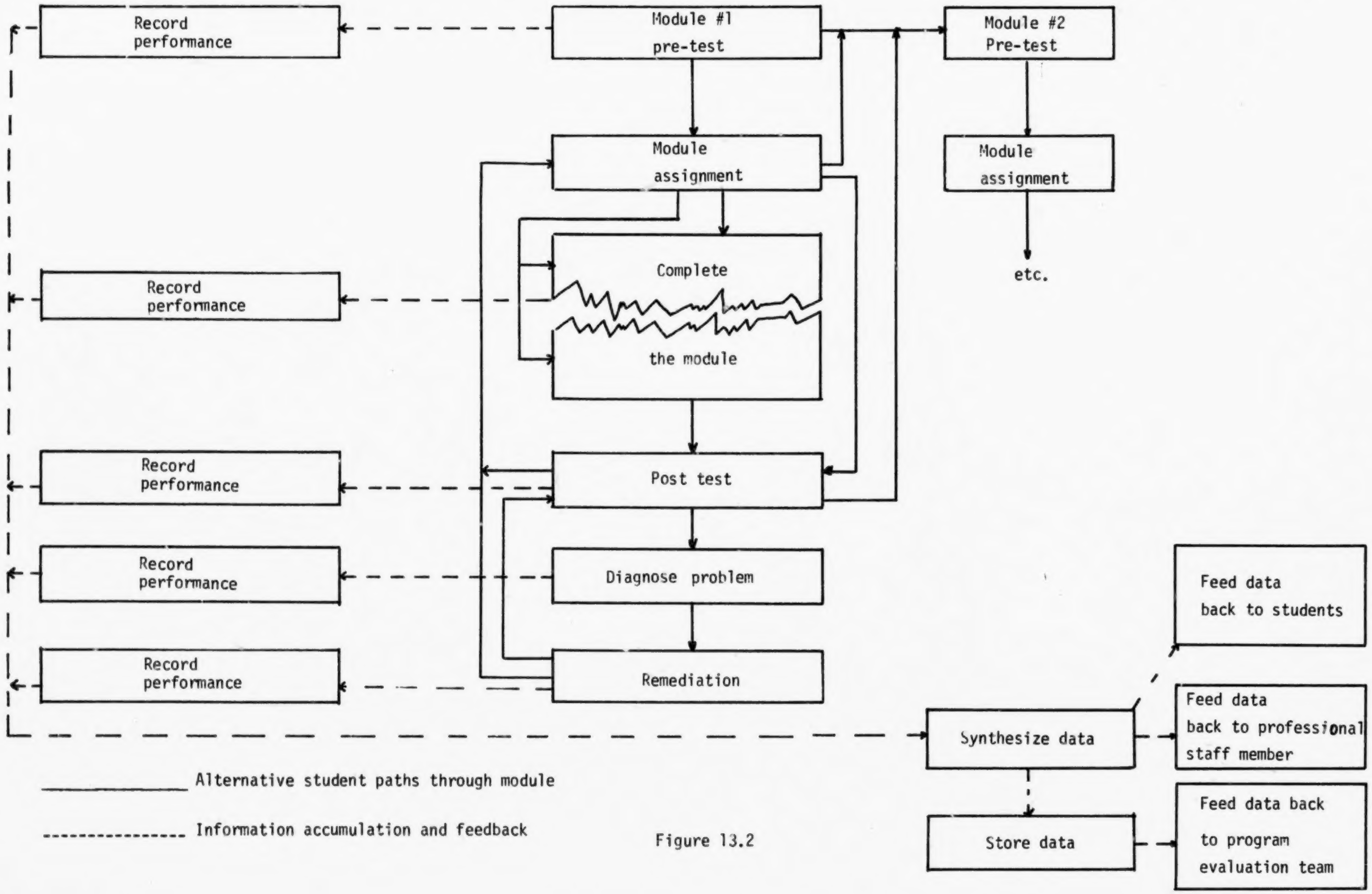

Record performance
Module #1 pre-test
Module #2 Pre-test
Module assignment
Module assignment
etc.
Record performance
Complete the module
Record performance
Post test
Record performance
Diagnose problem
Record performance
Remediation
Feed data back to students
Synthesize data
Feed data back to professional staff member
Store data
Feed data back to program evaluation team
Alternative student paths through module
Information accumulation and feedback

Figure 13.2

to be complete must collect data on all three. A discussion of each of these three types of measures as they apply to this Model follows.

Presage Evaluation

Presage variables represent the input variables, or the variables that characterize the students prior to their entrance into a specific module, component, or the program itself. Presage variables thus represent any measures administered or collected a priori. There would be no intention of using any of these variables for selection or deselection of candidates other than those required by the college or university to determine admissibility. There are any number of reasons why selection would not be feasible, but at least two would seem to be salient. First, since the program is developmental and untried, there would be no basis for selection; second, the heterogeneity of the student characteristics would afford a better understanding of the role of the variables when the program is operative.

But as Getzels and Jackson (49) have pointed out, "the number of instruments available is legion...The use of tests on the basis of availability rather than on relevant personality concepts...has led to a "shotgun" type of research yielding outcomes that are often inexplicable."

Since it would be difficult to anticipate all of the information that a particular teacher education program might eventually need, the guidelines for the selection of instruments have to be derived hypothetically. It is with respect to the presage variables, therefore, that a theoretical conceptualization of the relevant variables together with their measures is most crucial. Gage (45) has suggested that multiple theories rather than a single one have greater payoff at this stage of our understanding of teaching. Following this strategy, there are a number of potentially useful and promising presage variables that can be theoretically derived and that are relevant to the type of product that the Syracuse program intends to turn out.

Guilford's (58) model of the structure of intellect, although used by Gallagher (48) and his colleagues to describe process variables in the classroom, has been used rather sparingly to generate presage variables. A recent study by Joyce (72) suggests that convergent and divergent thinking measures when used as presage variables have important implications for the process variables in teaching. Other dimensions of Guilford's theoretical model would seem to have relevance for teacher-students, particularly his tests eliciting evaluation abilities, and his newly-created measures of behavioral cognition.

The motivation theory explicated by Atkinson (9) is another approach to the derivation of presage variables, since the type of teacher that the program would like to turn out can be described as one concerned about a standard of excellence, about decision-making and about self-reliance. While the instruments for measuring the constructs of need for achievement, need for affiliation and need to avoid failure are relatively crude, they elicit variables that are directly related to the Model Program.

The conceptual systems theory of Harvey, Hunt, and Schroeder (63) is still another from which presage variables evolve. For example, the conceptual level of the student has been found, by Hunt and Joyce (69), to differentiate how teachers handle information in the classroom. Very few studies, however, are reported using the conceptual level or the information processing abilities of students as presage variables.

It is not the purpose here to list all possible presage variables. The three theories noted above are obviously not inclusive, and there are other theories from which presage variables can be derived. The important point is not which theory or theories a teacher training program uses as a guide in its selection of presage variables, but rather that presage variables be chosen that are relevant to the processes and products the program espouses and that contribute to an evaluation that can be cumulative. In other words, the more careful "rifle" approach in the selection of presage variables will allow the teacher training program to develop over a period of time increasing knowledge about the program's inputs. An added result might also be the development of theories of instruction that Gage (44) suggests need to be developed alongside of rather than solely in terms of the theories of learning, motivation, social behavior, etc., that are usually considered.

The focus of the presage evaluation will be primarily in terms of the student inputs. There are obviously other presage variables that are relevant. The inputs provided by the instructional staff, the training models, the social and academic climate of the modules, etc., all may be regarded as presage variables that need to be evaluated. All of these and other human and material resources that are inputs of the program have to be analyzed and described if the teacher training program is to be refined and improved.

Process Evaluation

Throughout the descriptions of the various components of the model a number of variables have been specified that can only be understood and described in terms of the elicited behavior of the students. For example, the Professional Sensitivity Training Component is made up of a series of modules nearly all of which require the monitoring and evaluation of the on-going activities of the students. The other modules similarly depict activities which imply process measurement. Hence, if the program is to be properly evaluated, all of these processes have to be examined.

In nearly every instance of process evaluation, the modules indicate that the instruments are either lacking or need to be developed. Thus, a major focus of the Information and Evaluation Support System will be the development of instruments required for process variables. These instruments will require the recording of behavior and its systematic analysis.

Data storage and retrieval are a most crucial and vexing problem for process evaluation. For example, if the behaviors of concern are simply video taped and stored without some systematic way of analyzing and recording the information, the program will very soon run out of money and space. Ways of transferring process information to more feasible storage modes have to be found so that the data so stored during one stage of a component can be easily retrieved and related to later or different stages. Flanders' system for analyzing classroom interaction is an example of one way by which complex process data can be summarized and stored for subsequent retrieval; methodologies have to be devised which can be similarly applied to other process variables.

Product Evaluation

What kind of teachers is the program producing? What are their skills? These and like questions necessitate looking at product or output variables. As noted at the beginning of this section on the Information and Evaluation Support System, a program cannot fully answer questions about ultimate products during its development phase. Even in a completed program, questions of such a broad range may not be fruitful. What can be answered though, are many questions involving micro-criteria. Gage has stressed the fact, and it was noted above, that evaluation aimed at a general criterion of teacher effectiveness has yielded few reliable and usable findings.

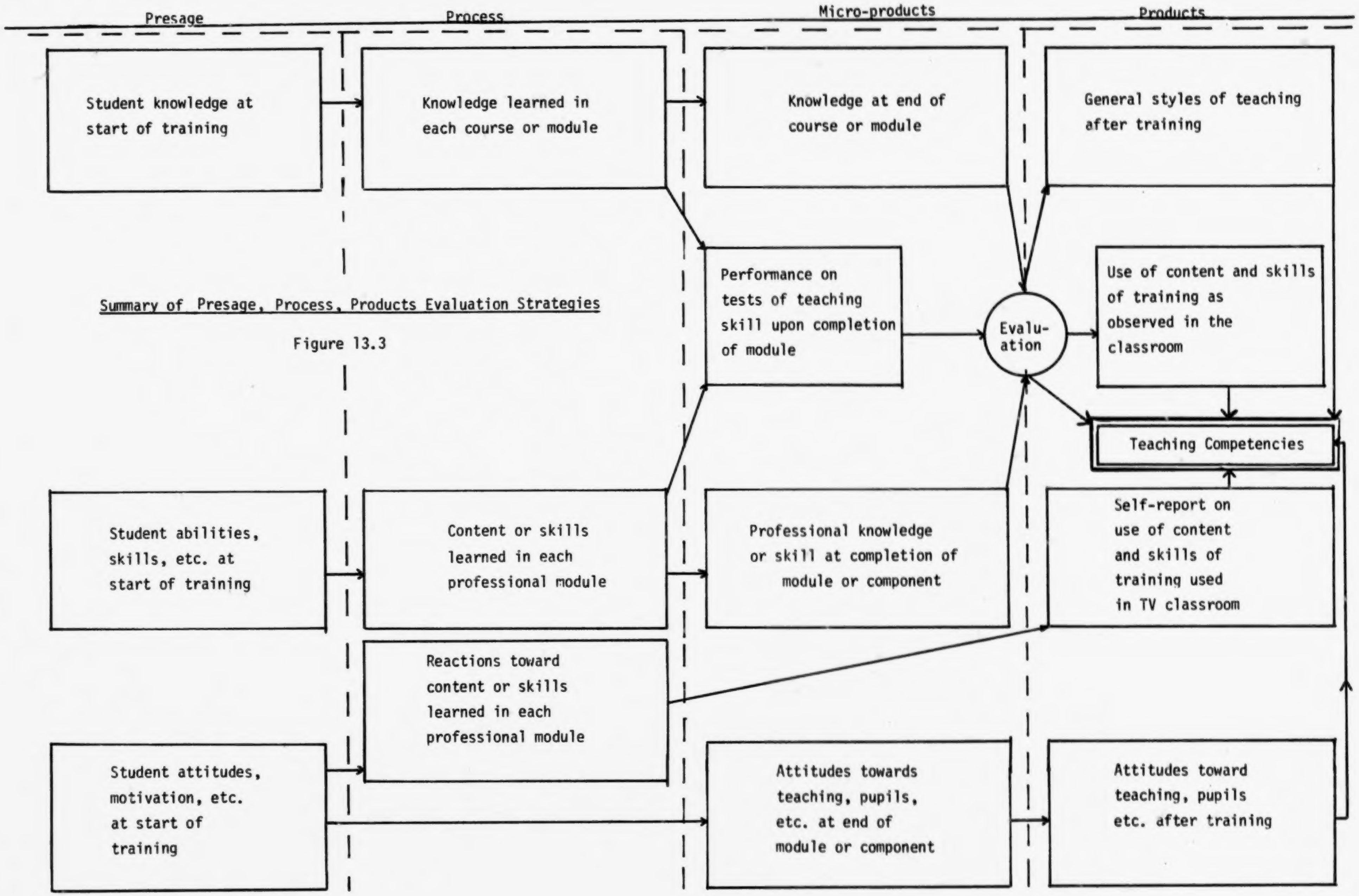
As an alternative to products involving global criteria, Gage has suggested the development of micro-criteria and the notion of "micro-effectiveness". He and his co-workers have proceeded to study and develop the criteria that characterize the explaining ability of teachers as one example of micro-effectiveness. Other aspects of teaching can similarly be studied. It is convenient, therefore, to think of the output of each module as a micro-product to be evaluated.

There is another aspect to the evaluation of micro-products that needs to be explicated. The usual procedure in determining the effects of a program is to apply a pre-test, apply the program treatment, and then note changes that have occurred through some kind of post-test. Webb and his colleagues (143) have stressed that the results of such a testing program have to be validated through other means, preferably unobtrusive measures. Webb has pointed out that evidence is more persuasive if it is obtained from a triangulation of measurement processes. The important point is that triangulation can be applied to the micro-products of a teacher training program, although the strategy is somewhat different than the one proposed by Webb (143). In addition to the traditional test-retest strategy, there are at least two other elements that can contribute to the evaluation; these are the perceptions of the students and of the teachers as to what has taken place within a module. Much of the research on the impact of a program on its students has ignored these internal reference points, and has concentrated solely on an external reference point -- change as reflected by test scores. The need for a multi-dimensional evaluation of the products of an educational program is exemplified by the numerous studies that have reported no significant differences between those exposed to a particular program and those not. To some extent these non-significant differences have resulted from faulty methodology, but even when the evaluation has followed more rigorous procedures, non-significant differences have been usual. The Higher Horizons Project is a case in point for the triangulation of the micro-products of a training program. While no significant differences were found between an experimental group receiving the Higher Horizons Program and a control group matched on a number of relevant variables, the teachers and principals who had participated in the program felt it was having an impact so important that the program could not be discontinued. In other words, two of the reference points did not triangulate.

It is particularly relevant that in a self-paced program, information be obtained about the micro-products of the modules through the process of triangulation. The student, the instructional staff, and test data on the instructional experiences of a module all must be considered. Where the three points of reference are congruent, the evidence of the effectiveness of the module will be that much more valid for a particular individual or group. Where there is a lack of congruence, the differences have to be identified and eventually reconciled. At any rate, the problem is one that has been ignored in teacher training and need not be. As well, the evaluation of the module products in this manner takes into account the behaviorists' and the phenomenologists' view of reality and might even bring them together. The instruments required for triangulating the program's effects will involve the post-tests specified in the various modules, teacher ratings, self-reports, self-prescriptions, and other measures that will have to be developed.

Summary of Evaluation Strategies

Figure 13.3 summarizes the presage-process-product evaluation strategy to be applied to this model. The broken vertical lines divide the figure into the evaluation phases. The arrows indicate some of the primary ways data will be examined. A horizontal arrow represents a line that can be followed to determine amount of change or learning in each phase of the program. The diagonal arrow signifies a relationship that might be studied in order to find possible ways of improving the program. Differences in student learning rates, cognitive preferences, goals, attitudes, motivations, and the like can be identified and their relationships to and interactions with such variables as mode of presentation, content, learning environments, etc., be examined. The relationships and multi-relationships between and among presage-process-product variables are obvious research targets. Research can also be carried out on program dimensions that can be manipulated at the module level (116). These dimensions include instructional media, pairing modes, the monitoring contingency, and the monitoring agent.


Presage
Process
Micro-products
Products
Student knowledge at start of training
Knowledge learned in each course or module
Knowledge at end of course or module
General styles of teaching after training
Performance on tests of teaching skill upon completion of module
Evalu-ation
Use of content and skills of training as observed in the classroom
Teaching Competencies
Student abilities, skills, etc. at start of training
Content or skills learned in each professional module
Professional knowledge or skill at completion of module or component
Self-report on use of content and skills of training used in TV classroom
Reactions toward content or skills learned in each professional module
Student attitudes, motivation, etc. at start of training
Attitudes towards teaching, pupils, etc. at end of module or component
Attitudes toward teaching, pupils etc. after training

Summary of Presage, Process, Products Evaluation Strategies

Figure 13.3

As noted several times in the preceding paragraphs through a process of iteration, research suggestions should yield information that will refine and improve the program and also contribute to knowledge about teacher education. The most appropriate statistical treatments at this point would seem to involve many of the multi-variate statistics that are summarized by Tatsuoka and Tiedeman (133), particularly multiple regression, multiple discriminant analysis and factor analysis.

Dissemination

The last part of the Information and Evaluation Support System deals with the problem of dissemination. Although some headway has been made in recent years by such information systems as ERIC in disseminating research and practice findings to the practitioners in the field, the problem of adequate dissemination is serious. If those involved in the proposed model are to be successful they must communicate with groups within various segments of our society. These segments can be viewed as broadly as the industrial, governmental and educational sectors; they also can be viewed (and more usefully) as narrowly as parents of fifth grade students, classroom equipment designers, fourth grade social studies textbook writers, regional laboratories personnel, etc.

Dissemination as it is used here does not refer to the problem of two way communication so that the system remains open; dissemination is used to mean the development of message units designed to inform or convince some group about the teacher training program. To do so successfully depends upon a careful explication of reasons as to why the various audiences should be informed, analysis of the reception patterns of these audiences, and the design of appropriate message units whether by print, film, tape or TV.

CHAPTER 14

THE ORGANIZATIONAL SUPPORT SYSTEM

Aside from specifying the particular components and relationships for a new program in teacher education on the substantive level, the model program described in the previous chapters will require considerable change at the organizational and process level. The operation of the model program will require far-reaching structural changes within the adopting university or college, and within school systems that have the three types of teaching centers that would be developed as the program is implemented. It will require a change in public school/university relationships from one that has typically been conflictual due to the interplay of competing value systems to one that is collaborative. The successful implementation of this model will require the development of new relationships between industry, regional laboratories and the university and public schools. These changes cannot be haphazard. They will have to be planned, implemented, and subject to continual evaluation.

It is because of the planned nature of these changes that an Organizational Support System has been specified as an integral part of the model. In organizational terms, this support system may be conceived of as incorporating two kinds of organizational sub-structures as described by Katz and Katiu: (75)

1. The maintenance sub-structure

2. The adaptive sub-structure

As the program is developed and implemented, the focus of the adaptive sub-structure will change, as will the focus of the maintenance sub-structure. This change of focus will be a function of a shift of personnel who are currently outside of the system to a position inside the system. The maintenance sub-structure focuses internally. Its functions are aimed at maintaining stability and predictability within the organization. Operationally, this implies the need for role functions that will establish:

1. Internal communications linkages among faculty, students, and administration.

2. Adequate feedback loops so that the data concerning the state of the organization can be transmitted efficiently to local decision points.

3. Appropriate training and organizational development experiences so that the internal organization can be continually self-reviewing and self-renewing.

The adaptive sub-structure focuses externally. Its primary aim within the organizational context would be to help maintain an element of consistency and predictability in the external environment so that the program can function effectively as an organization of its own in close working harmony with the sectors of the university, public schools, industry and regional laboratories that are not directly involved in teacher education.

The two component parts of the Organizational Support System--the maintenance and adaptive sub-structures--will, of necessity, interlock with each other. The points of interlock would occur when:

(a) Communications from either the internal or external environment need to be fed into the total system.

(b) There are decisions that have to be made that will affect either the substance or processes of the two environments.

(c) There is potential or actual conflict between the two environments.

The rationale for including an Organizational Support System into the Model Program has been mentioned briefly above. Elaboration is needed, however.

Universities, like school systems, have not been noted for the ease and eagerness with which they change their structure and processes in order to confront new conditions, externally or internally. Indeed, one might take the position that the stance of universities toward change is symbolic of their having discovered some all-pervading truth and that sooner or later, despite whatever tension and turmoil develops, the various publics that are related to the university will realize this fact. It is quite true, of course, that some institutions of higher education have engaged in exciting experimental programs that involve radical changes in structure and curriculum. By and large, however, these programs have tended to be continued at relatively small colleges where the emphasis is on teaching. Universities, because of their value system and consequent reward systems related to research and publication, tend to be less concerned with program development. University faculty members tend not to be rewarded highly for spending a great deal of time and energy on curriculum matters. In addition, in contrast to smaller institutions, the larger university is typically much more unwieldy. The channels of communications and decision-making are relatively more vague. Thus, the induction of formalized change into the university structure becomes a difficult and energy-consuming affair.

School systems and schools, despite the rash of new programs that have developed in recent years (largely developed at the national level) have not, similar to universities, established reputations for innovativeness. Nor, typically, can the relationships between the schools and the universities be typically described as collaborative, at least on a level below that of verbal compliance. These are outstanding exceptions, but they are few.

Reasons for what appears to be the reluctance of schools to embark on changes in a school, let alone in a school system, bear some similarity to the university situation, but also are marked by some generic differences. In particular, large city school systems are very complex organizations. Although the locus of central office decision-making may be clear, it not infrequently occurs that communication channels to those points are burdened by familiar bureaucratic barriers. Thus, the inducement for change, particularly from lower levels of the organizational hierarchy, is a process that is fraught with difficulty.

There are problems, however, that intrude into the school environment that either are not present on the university level or, at least, not to the extent that they are evident in the schools. First is the point that schools are much more subject to community influence than are the universities. Indeed, it is true that the nature of a school system's program tends to reflect the demographic factors of the community it serves. The socio-economic level, occupational status, societal mobility, etc., all have a bearing on school programs and on the nature of administrative and teaching personnel that are employed. In this respect, schools are much less than free agents, organizationally, in comparison to their counterparts in higher education.

Secondly, the role of the public school teacher and professors at some colleges, though not necessarily by design, has not included much in the way of responsibility for decision-making on matters related to curriculum, organization or personnel. There is, however, much more of an apparent employer-employee dependency relationship in the schools than in universities. The teacher's job, in a sense, is to teach and not become involved in consort with his peers in developing curricular innovations or attempting to change the system.* There appears to be some evidence that teachers will devote time and energy to changing their work environment and to becoming deeply nvolved in teacher education if given the opportunity to do so. However, there seems to be no widespread movement to stimulate such involvement on the part of school administrators and school boards.

Related to and stemming from the change problems associated with universities and schools are the relationships that have been established between the two. Historically, university/school relationships have not been marked by an eagerness to establish long-term protocooperative relationships. There are a number of reasons for this state of affairs, allusions to which have already been made. Perhaps the root of the problem stems from conflicting value systems held by the two institutions. In its most general terms, this conflict may be stated as follows: The university's primary interest in the schools has been seen by many as using them to collect data for research and as a place to let student teachers practice. The schools, on the other hand, are dedicated to the education of youth and children, are action-oriented, and tend to place little faith in the ability of educational research to help solve their problems (with good cause, one might suspect). So, when the university approaches the school in a collaborative effort, what is often perceived by the teachers is yet another time when the professors will use them as experimental subjects without the professors reciprocating by lending some productive help to the teachers.

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* Undoubtedly this state of affairs is currently in the process of change due to the new militancy of teacher organizations. It remains to be seen whether or not the "system" will eventually absorb the impact of this phenomenon.

The latter point is a critical one because in the final analysis there appears to be a widespread feeling among public school personnel that the professors may be very good theoreticians, but they can't produce onthe firing line. They also do not seem to have the answers that will help teachers teach better, at least as the teachers see it.

Thus, relationships between university and school are often marked by distrust, suspicion, mutual disrespect and closed communications rather than their polar opposites.

The eventual success of the program described in this report will depend heavily on the establishment of a healthy collaborative relationship that involves people from the public schools, the universities and colleges, the educational industries and the regional laboratories. It will be the function of the Organizational Support System to aid in the development and nurturing of productive relationships and to function as a continual communication facilitator between the several institutions involved.

The remainder of this chapter will deal with the development of:
(a) the role of specification for the Organizational Support System, and
(b) sub-models for the more specific functions that the system will perform.

Role Function for the Organizational Support System

The functions of the Organizational Support System are more familiar to industrial organizations than they are to educational organizations,for example, there are few corporations of substantial size that do not include within their structure provisions for functions variously described as organizational development, management development, manpower development or human resources development. The same cannot be said for either universities or school systems, great numbers of which, on a budget and personnel basis, can qualify as large organizations. The development of this model program with its corresponding role functions, should be an interesting testing ground for a structural and functional innovation in the field of education organization.

The role functions of the Organizational Support System are, of course, related to the two sub-functions of maintenance and adaption.

It needs to be understood that the functions that are specified deal with parameters of concern that should be considered by a potential adopter, and are not suggested as specific methodology.

The Maintenance Sub-Structure

Functions of the maintenance sub-structure are as follows:

(a) To develop an appropriate inservice training methodology, the aim of which is to help develop and maintain the type of personnel that the model teacher education program would require. The task is not a minor one, and it is essential to the operation of this model.

(b) To develop appropriate techniques for developing and maintaining communications linkage between the students in the program and with the faculty.

(c) To develop appropriate structural innovations and techniques for involving students and faculty in joint decision-making on matters of mutual concern.

(d) To develop an effective feedback network so that the state of the program and of the organization may be assessed on an ongoing basis.

(e) To provide evaluation on matters pertaining to the state of the organization, intra-organizational communications, staff problems, and projected future needs.

In the classic organizational sense, these are staff functions. There are organizational implications of this concept which are a point of concern. Because staff roles do not carry specific "production" responsibilities, there is a tendency for those roles to be perceived as being somewhat tangential to the overall organizational operation. What this means on an operational level is the creation of a perception of role value for personnel of the Organizational Support System. Others in the program must see the roles of the Organizational Support System as being an integral and important part of the enterprise. The mere creation of the role within the organization is not likely to fulfill this requirement.

The Adaptive Sub-Structure

Functions for which the adaptive sub-structure has responsibility are the following:

(a) To specify methods to assess the readiness for change of the various external organizations (the universities as a whole, school systems as a whole, the educational industries and regional laboratories).

(b) To create a change model that will function in such a way as to break the stereotypes and traditional structures that could seriously impede the creation of a teacher training program that functions as a separate corporate entity, yet draws its resources and financial support from a variety of institutions.

There are organizational implications for the adaptive sub-structure role as well as the maintenance, which must be of concern to the organization. Because both functions are "process"-oriented, the task relationship between members of the group must be clearly spelled out to avoid ambiguity. Further, the organizational needs of the program will change as the organization moves from design through a development state into an operating program. As the kinds of contacts and role relationships change over time with more process sophistication on the part of team members, it is anticipated that the function of the organizational system will also change from that of design and innovation to evaluation, and research.

Interaction with Program Components and Other Support Systems

At this time, it is impossible to specify the precise points and times of contact between the Organizational Support System and the program components and the other support systems. On a global basis, however, it can be said that it will be the function of the maintenance sub-structure to monitor (in the sense of collecting data) the development of the organizational climate that is engendered through both student-faculty relationships and the unique structural innovations that are concerned with the implementation of the program components. This monitoring will involve data-collection methods ranging from dyadic interviews to group interviews to paper and pencil instrumentation. The information so gathered will be fed back into the system for analysis and decisions about utilization.

A note of caution is appropos here. Care needs to be taken that the "tail does not way the dog." That is, the goals of the total program are related to teacher education and not to the development of any particular kind of organizational climate. The latter, however, as it is qualitatively, defined, exists only to facilitate the former. The point, then, is that it will be necessary to insure that both the students and the faculty in the program are not overloaded with process-oriented data collection efforts and that the information received is useful to the program and is used.

Further Specification of the Sub-Structure Functions of the Organization Support System

The remainder of this chapter will be concerned with describing, in somewhat more detail, the nature of the technology and methods that might be employed by the maintenance sub-structure with some reference to adaptive sub-structure. The chapter will close with a descriptive discussion of three steps that will be necessary for the development of a protocooperative organization.

It needs to be borne in mind that programmatically, the operation of the Organizational Support System has vaguer boundary lines than do the other support systems and the program components. This is so because a major part of its function is to be sensitive to the state of the organization (the internal and external relationships) so that problems or potential problems may be sensed, diagnosed, and remedied. With such a design in mind, particular time-place activities cannot be prescribed for every activity of the system. Some can, however, and this will be done in this chapter. For those activities that can be thought of as more "free floating", the objective will be to describe the variety of inputs from which those most appropriate, at any particular time, may be selected.

The Basic Technology

The basic technology utilized by the Organizational Support System is derived, generally, from the field of applied behavioral science, with particular reference to studies and programs of change involving interpersonal, group, and organizational relationships. On a methodological level, this will involve use of such programmatic devices as human relations laboratories, including sensitivity training, confrontation methodology, team-building exercises, communications exercises and such applied behavioral science innovations as may need to be developed. The technology also includes the use of appropriate instrumentation designed to seek out data for feedback and action, as well as for research purposes.

The Maintenance Sub-Structure

With regard to the functions of the maintenance sub-structure, the following activities are suggested as a means of developing and maintaining the organization internally:

Function 1. To help build and maintain the personnel involved in the model program into a collaborative team.

Initially, as soon as a decision is made to develop and implement the model program, the total project staff might meet for a three day team-building conference. This conference should be staffed by personnel of the Organizational Support System plus any outside consultants that seem necessary. The focus of the conference will be on goal and role clarification of all the inter-locking roles and functions of the various personnel to be involved in the program projects.

Considerable attention should be placed during the conference on process-orientation. That is, not only should the total staff be concerned about what it is doing but also with how it is operating. The reason for this is that the development of an open intra-communications system demands a concern for matters of "here and now process" so that communications blockages may be dealt with when they occur and not be left to expand until a crisis-point develops.

It is advisable that a series of team-building conferences be scheduled during the course of the project's development. They might be structured, at first, on a quarterly basis, but interim, shorter conferences should be held to meet any need that might occur. It is possible that a need will develop to engage in a sensitivity training laboratory. If so, outside consultants should be engaged to conduct it.

Function 2. To devise appropriate techniques for developing and maintaining communication linkages between students in the program and the faculty.

This function is a critical one. If the project is to develop into more than new day of "doing something to" students, it is important that they be considered as valuable resources and, in a sense, as members of the team.

The concept of students and faculty engaging in a collaborative manner is a relatively alien one in higher education. Neither students nor faculty are accustomed to it. The implications of this are that students will have to learn how to work with the faculty, and the faculty will have to learn how to work with the students. The functions of the Self-Directed Component should have considerable potential for stimulating this kind of a relationship.

Operationally, then, as far as the students are concerned, initial "student organization" efforts will be aimed at developing the student aggregate into a goal-centered organization whose task is to establish reciprocal linkage with the faculty. Both small and large group student meetings could be held in order:

1. To help develop the students organizationally.

2. To help devise ways through which the student can communicate.

3. To help develop an internal communications network of the student group.

It is important to note that the involvement of the staff of the maintenance sub-structure with the student group should be planned for in conjunction with personnel of the Self-Directed Component. Such involvement should be continual, not haphazard. The development of the kind of trust anticipated between faculty and students is not the kind of thing that takes place over the short run. Nor, once a high degree of trust is established can it be assumed that it will remain without continual attention being paid to it. On the contrary, ongoing, open relationships with the students need to be maintained as the model is developed and implemented.

Function 3. To devise appropriate structural innovations and techniques for involving students and faculty in joint decision-making on matters of mutual concern.

This function, of course, stems directly from Function 2. That is, part of the aim of developing the student group into a viable organization is to enable the students, in an organized manner, to exert productive influence on the program of which they are a part.

Obviously, some mechanism needs to be devised that will be the vehicle for joint faculty-student decision-making on matters of concern to both parties. Also, a method will have to be developed that will insure adequate and informed student representation in the decision-making structure. One technique for accomplishing this is the triangulation concept of program evaluation that was discussed in the preceding chapter on the Information and Evaluation Support System.

Operationally, then, in regard to Function 3, the responsibility of the maintenance sub-structure will be the following:

1. To propose alternative decision-making structures to the faculty and students for their joint agreement on the most feasible and potentially productive way of working.

2. To work with the faculty to help them devise a workable representative system and to prepare them for student-faculty interaction on decision-making matters.

3. To serve as a process consultant at decision-making meetings.

Function 4. To develop an effective feedback network so that the state of the program and of the organization can be assessed on an ongoing basis.

Two points are at issue. First is the necessity of being able to collect reliable and valid information concerning the state of the organization at any given point in time. An up-to-date data bank needs to be maintained concerning, for example, answers to the following questions:

1. Are the organizational communications channels effective?

2. Are decisions that are made having their intended effect in action?

3. At what organizational points or boundary lines does conflict develop?

4. At what points do role conflicts develop?

5. About which organizational roles is there need for clarifi-

cation?

6. To what extent are perceptions of organizational goals clear and unambiguous?

The second point is program-centered (not organizationally). Among the things about which information is needed are the following:

1. What is the state of student involvement concerning particular program components?

2. What is the state of student attitudes concerning their involvement in the program?

3. What kinds of organizational problems occur as students move from one learning module to the next?

4. What kinds of faculty behaviors prove helpful or unhelpful in program development and faculty-student relationships?

It will be the responsibility of the staff of the maintenance sub-structure to develop close working relationships with personnel of the Information and Evaluation Support System in gathering information of the kind noted above. This kind of measurement would probably include paper and pencil instruments as well as individual and group interviews.

The information needed must be accurate and up to date. The system must be such that new information can be obtained quickly and efficiently.

Function 5: To provide evaluation data on matters pertaining to the state of the organization, intra-organizational communications, staff problems, and projected future organizational needs.

In the line-staff terminology of typical organizational structure, the role of the maintenance sub-structure is "staff". This is not to imply that the organizational structure of the model program should be built on typical line and staff relationships. The organizational structure will vary from one adopting institution to another. As can be seen from the foregoing pages, the role of this sub-structure is not directly tied in with the productivity of the organization. It is, of course, indirectly so as it functions to help develop the organization in more or less of an internal change agent capacity. In this sense, the system provides a "staff" function. Part of acting in this capacity involves serving as an advisor on organizational matters to program personnel. This role is a delicate one. Much of its success will depend on the ability of the program director and personnel to develop confidence and trust in each other.

The Adaptive Sub-Structure

The development of the methodology for implementing the function of the adaptive sub-structure may be a more complicated affair than was the same task for the maintenance sub-structure. The reasons for this difference are related primarily to organizational variables and not to such matters as personality or interpersonal relationships. For one thing, in as much as the adaptive sub-structure is externally oriented, it has no real control over the university as a whole, the public school system or on a particular industry. The persons who take leadership in developing and implementing a model program such as this one cannot tell a school system, for example, that it should do thus and so. Nor could the program as a corporate entity demand certain types of resources from the president of the university or director of a regional laboratory. This does not mean, of course, that the program as a corporate entity is completely without power, but that its prerogatives are limited to relationships and functions that will have to be defined early in the development of the program.

A second complicating factor, mentioned earlier, is related to the differences in goals and values that are typically held by universities and schools as compared with the goals and values that characterize the concept of a teacher education program described in this report. One primary barrier is concerned with the stereotypes that people in the university and the schools hold with respect to teacher education. For example, the university administration and faculty often perceive the teacher education faculty as low men on the totem pole of academic prestige. On the other hand, school boards and chief school administrators are not noted for their interest in becoming deeply involved by providing personnel and money for the preservice training of teachers. Until these traditional stereotypes are modified, support for the program will certainly suffer.

These two functions then--organizational control matters and differences in goal and values--are backstage throughout this consideration of the functions of the adaptive sub-structure. They should serve as reality oriented constraints to caution program personnel against trying to make the "blue sky" a reality without regard to other dimensions of the systems from which they draw their resources and financial support. Yet, new ways of perceiving and supporting teacher education must be developed if the program is to function well.

This background leads to a discussion of potential methods for operationalizing the functions of the adaptive sub-structure, i.e., to specify methods to assess the readiness of the various external organizations to accept change.

It has been noted that the changes contemplated by the implementation of this model program need not be, indeed, cannot be haphazard. This point holds for program development within the total program as it exists within the university, the teaching and residence centers or other organizations that may be involved.

The most essential change that is called for here is one that views institutional role relationships in a collaborative fashion. Collaboration, as it is used here, implies a number of relationship dimensions. They are:

1. The mutual perceptions of the university, the public school systems, and industry that each has special resources that they can contribute to the program.

2. The creation of a mutual perception that by making such resources available to the program as a corporate entity, they as larger institutions will benefit from the collaboration.

3. The communications that exist between and among institutional personnel is characterized by honesty and the ability to "level".

4. The interpersonal and group relationships that exist between and among institutional personnel are characterized by warmth, not coolness.

5. Perceptions of program goals are congruent among all personnel relative to the collaborative effort.

Obviously, relationships that have this set of characteristics do not develop overnight nor can they be mandated. Further, organizations differ in their ability and readiness to engage on the kind of collaborative level as seen necessary here. The first step, then, is to establish a means of assessing the readiness of the organizations (the universities, industry, the regional laboratories, and the schools, in this case) to change from their traditional role relationships with respect to the training of teachers to new ones.

The criteria for identifying schools, universities, and industrial organizations to be involved are similar to the characteristics noted just above. That is, ideally, the institutions are ready to change, i.e., have already built into them an attitude and behavioral set that is conducive to giving the support called for to develop and implement the model teacher education program described in this report. The problem is to discern which institutions meet the criteria or have the potential for meeting it.

It is not prudent here to specify the precise methods that will be used to discriminate between currently existing organizations that are ready to give support to such a program. Several guidelines, however, may be suggested along with some alternative data-collection methods.

1. Communication needs to be established with the top echelon decision makers in each of the institutions that would be involved. It will be important that they understand the program, what their costs will be, and what will be their

gains, and that they affirm their backing.

2. Similarly, communication needs to be established with other line and staff personnel whose roles are related to the operations of the institutions as they currently exist. These other people are likely to be the assistant superintendent for instruction, building principals, coordinator of elementary education, and the appropriate personnel of the education products division of industry.

3. The ultimate decision about whether or not to participate in the program should belong to the university teacher education faculty and the public school teachers who will be most directly involved in the program. If the principal or department head makes the decision for his faculty without their advice and consent, an essential element of the collaboration effort is lost before it started.

In addition to the points made above, it would also be advisable to collect and analyze data that is relevant to the organizational climate of the organizations under consideration for collaboration. A variety of methods might be appropriate including:

1. Interviews, both individual and group.

2. Observations of faculty meetings and other "decision-making" meetings.

3. The use of questionnaires and rating scales that tap information concerning the behavior of the people who would ultimately be involved, and the organizational climate of the institutions in which they work.

Data collected through the use of these methods could serve as an initial screening device. Initial decisions could be made by an administrative and staff task force using the criteria for selection referred to above.

In any event, and to repeat, early involvement of personnel of the collaborating institutions is essential. This suggests that the screening and selection process should start as early as possible after a decision is made to adopt the program. Indeed, it would be most appropriate to gather institutional climate and readiness data before deciding whether or not to adopt this model program in the first place.

Implicit throughout this chapter, and indeed the entire report, is the realization that the structure, content and organization of teacher education is in a process of re-thinking and change. An adopter of this model will be caught up in that change. We have made many implicit references in this chapter to the need for development of an organizational structure that will be not one that is. Moving from the "is" to the "will be" will necessitate the recognition of what now is, and at least one possible intermediate step in the process of attaining what will be. We have asserted that the present state of relationships between the institutions that are directly or indirectly involved in teacher education is characterized by vacillation between the ecological conditions of neutralism, commensalism, and parasitism. In such conditions, the university is seen as The teacher education institution, and the public schools, educational industry and regional laboratories are viewed as "The outsiders" with whom an adaptive sub-structure would work to solicit and nurture their involvement in and cooperation with the university's teacher training program as defined by the university. The maintenance sub-structure in this case operates within the university's teacher education program.

An intermediate step could be conceived of in which each of the institutions involved in teacher education have a commitment to the process, but the program remains the university's. In this condition, the university would ask for the advice and consent of other institutions in planning and operating their program, but the program would remain under the control of the university. Under this condition, some of the functions of the maintenance sub-system would begin to operate informally within sectors of the other institutions, but their continued presence would be at the discretion of the cooperating institution. Under such a condition, the distinction between functions of the adaptive and maintenance sub-structures begins to blur. Here there is a continuing pervasive function of the adaptive sub-structure to keep channels of communication between the university and the other cooperating institutions open and to change roles of personnel in these institutions. They have, however, no mandate from the cooperating institutions to modify the roles of personnel in those institutions. Their power is that of persuasion of people who are "outside" the central system to cooperate with that system. There are many examples of this condition in operation today and some of their successes and failures are documented in a recent publication, Partnership in Teacher Education (126).

In the multi-institutional protocooperative organization that has been proposed in this model, the "outsiders" become the people within those institutions who are not a part of the corporate entity of the teacher education program itself. Thus, the focus of the maintenance sub-structure spreads to include many people in many institutions. This requires the development of new roles, new relationships and new channels of communication that were previously the responsibility of the adaptive sub-structure and now become the interest of the maintenance sub-system. The focus of the adaptive sub-system becomes that of looking to the other members of the participating institutions who are not directly involved in the teacher training function of the organization. The roles of the adaptive sub-system now become more characterized by nurturing and insuring the cooperation and support of the larger institutions and that of maintaining open lines of communication between decision makers in the larger institutions and the teacher education program. Many of the human change agent roles that were appropriately subsumed under the adaptive sub-structure now become functions of the maintenance sub-structure.

This chapter has been largely written from the focus of the third condition. Throughout, however, there has been a recognition of the first two types of cooperative relationships.

Transition from the first two conditions to the third condition of protocooperation will vary in type and speed in various adopting institutions. The point on the continuum at which an adopting institution resides will have direct effect on the character of the program and support systems and the students and faculty that are an integral part of the model program.

Just as the program and other support systems in their developmental and operational phase are designed to be open to change, so too the character and functions of the Organizational Support System will change as the program is developed, implemented, and lives over time.

APPENDIX A

Teaching Competencies
Methods and Curriculum Component

APPENDIX A

Teaching Competencies
Methods and Curriculum Component

Language Arts

I. Speaking

   A. Classification of pupil subject-related behavior

      1. Identify types of formal and informal speaking that pupils do
      2. Compare speech patterns used in classroom with those expected at developmental level represented by the pupil speaking
      3. Identification of pupils who might need help of speech therapist

   B. Behavioral statement of objectives

      1. Translate concept, principle and affective goals into observable speaking behavior

   C. Construction and use of teacher-made pre and post-teaching diagnostic devices

      1. Checklists
      2. Conversation and discussion flowcharts
      3. Vocabulary ideation scales
      4. Structured speech tasks
      5. Individual progress charts

   D. Selection, use and interpretation of standardized tests in listenings

   E. Selection, construction and use of teaching materials

      1. Textbooks
      2. Written dialogues
      3. Informal and formal dramatic selections
      4. Articulation exercises and games
      5. Audiotapes
      6. Poems and recitations
      7. Pictorial and three-dimensional reaction materials
      8. Mimicking activities
      9. Topics for formal and informal speaking
      10. Teletrainer

F. Selection and organization of activities

   1. Match goals with the most appropriate activities
   2. Explain to pupils the purpose of the activity
   3. Give directions for ordering and carrying out activity

G. Lesson planning

   1. Individual
   2. Total group
   3. Multigroup

II. Listening

A. Classification of pupil subject-related behavior

   1. Identify types of listening
   2. Compare listening patterns of individual pupils with those expected at developmental level represented by pupil in question.
   3. Identify pupils needing referral to audiologist

B. Behavioral statement of objectives

   1. Translate concept, principle and affective goals into observable listening behavior

C. Construction and use of teacher-made pre and post-teaching diagnostic devices

   1. Checklists
   2. Sound identification scales
   3. Critical listening tests

D. Selection, use and interpretation of standardized listening achievement tests

E. Selection, construction and use of teaching materials

   1. Sound identification games
   2. Recorded listening problems
   3. Construction of self-evaluation devices in listening
   4. Critical listening problems
   5. Resource persons and field trips

F. Selection and organization of activities

   1. Match goals with most appropriate activities
   2. Explain to pupils purpose of activity
   3. Give directions for organizing and carrying out activity

G. Lesson planning

H. Unit planning

  1. Single subject listening
  2. Integrated with other language arts and with other subject complexes

I. Curriculum planning

  1. Identifying problems in listening curriculum
  2. Clarifying listening objectives
  3. Planning curriculum development schedule
  4. Interpreting listening curriculum to public
  5. Evaluating listening curriculum

III. Usage and Grammar

A. Classification of pupil subject-related behavior

  1. Describe linguistically pupil usage and grammar
  2. Develop criteria for acceptable usage and grammar

B. Behavioral statement of objectives

  1. Translating theoretical description of grammar into functional terms

C. Construction and use of teacher-made pre and post-teaching diagnostic devices.

  1. Oral grammar and usage tests
  2. Written grammar and usage tests

D. Selection, use and interpretation of standardized achievement tests

E. Selection, construction and use of teaching materials

  1. Tape recorded self-descriptive tasks in grammar and usage
  2. Written self-descriptive tasks in grammar usage

F. Selection and organization of activities

  1. Matching goals with activities
  2. Explaining to pupils purpose of activity
  3. Giving directions to pupils on organizing and executing activity

G. Lesson planning

  1. Individual and total group
  2. Multigroup and individualized

H. Unit planning

  1. Single subject
  2. Integrated with other language arts and with other subject complexes

I. Curriculum planning

  1. Identifying curricular problems
  2. Clarifying curriculum objectives
  3. Planning of curriculum development schedule
  4. Interpreting curriculum to public
  5. Evaluating curriculum

IV. Vocabulary

A. Classification of pupil subject-related behavior

  1. Describe pupil vocabulary development level
  2. Relate environmental factors and developmental factors to pupil's vocabulary development

B. Behavioral statement of objectives

  1. Translate stimulus-response, multiple discrimination and concept goals into terms of observable vocabulary behavior

C. Construction and use of teacher-made pre and post-teaching diagnostic devices

  1. Definitions lists
  2. Word matching devices
  3. Picture identification devices
  4. Picture-word matching devices
  5. Object-action-quality word matching tasks

D. Selection, use and interpretation of standardized achievement tests

E. Selection, construction and use of teaching materials

  1. Graded word lists
  2. Story filmstrips
  3. Story records
  4. Literary selections
  5. Experience stories
  6. Word identification games

        7. Word building games
        8. Dictionary exercises

    F. Selection and organization of activities

        1. Matching goals to most appropriate activities
        2. Explaining purpose of activity to children
        3. Giving directions for organization and execution of activity

    G. Lesson planning

        1. Individual and total group
        2. Multigroup and individualized

    H. Unit planning

        1. Single subject
        2. Integrated with other language arts and other subject complexes

    I. Curriculum planning

        1. Identifying vocabulary problems
        2. Clarifying curricular objectives
        3. Planning of curriculum development schedule
        4. Interpreting curriculum to public

V. Creative language expression

    A. Classification of pupil subject-related behavior

        1. Identification of creative language behavior
        2. Relation of creative language expression with environmental and developmental factors

    B. Behavioral statement of objectives

        1. Translate concept, principle and problem-solving objectives into terms of observable creative behavior

    C. Construction and use of teacher-made pre and post-teaching diagnostic devices

        1. Ideation tests
        2. Description tests

    D. Selection, use and interpretation of standardized achievement tests

    E. Selection, construction and use of teaching materials

        1. Reaction records, stories, experiences

        2. Literary selections
        3. Oral expression tasks
        4. Written expression tasks
        5. Word invention games

    F. Selection and organization of activities

        1. Matching activities to goals
        2. Explaining purpose of activities to pupils
        3. Giving directions for organization and execution of activity
        4. Establishing climate conducive to creative language use

    G. Lesson planning

    H. Unit planning

        1. Units on creative language
        2. Integrated with other language arts and other subject complexes

    I. Curriculum planning

        1. Identifying problems in creative language curriculum
        2. Clarifying objectives of creative language curriculum
        3. Planning curriculum development schedule
        4. Interpretation of curriculum to public
        5. Evaluation of curriculum

VI. Spelling

    A. Classification of pupil subject-related behavior

        1. Description of pupil's spelling characteristics
        2. Relation of spelling to environmental and developmental factors

    B. Behavioral statement of objectives

        1. Translation of stimulus-response, multiple discrimination, concept and principle objectives into terms of spelling behavior

    C. Construction and use of teacher-made pre and post-teaching diagnostic devices

        1. Word written reproduction tasks
        2. Noncontextual spelling tests
        3. Contextual spelling tests

    D. Selection, use and interpretation of standardized achievement tests in spelling

E. Selection, construction and use of teaching materials

   1. Phonic element word building devices
   2. Word cards and lists
   3. Dictionary tasks
   4. Spelling games
   5. Identification of misspelled word tasks

F. Selection and organization of activities

   1. Matching activities to goals
   2. Explaining purpose of activity to pupil
   3. Giving directions for organization and execution of activity

G. Lesson planning

   1. Individual and total group
   2. Multigroup and individualized

H. Unit planning

   1. Spelling units
   2. Integrated with other language arts and other subject complexes

I. Curriculum planning

   1. Identifying spelling curriculum problems
   2. Clarifying curriculum objectives
   3. Planning curriculum development schedule
   4. Interpreting curriculum to public
   5. Evaluating curriculum

VII. Handwriting

A. Classification of pupil subject-related behavior

   1. Description of pupil's handwriting
   2. Relation of handwriting to environmental and developmental factors

B. Behavioral statement of objectives

   1. Translate stimulus-response, multiple discriminations and concept objectives into terms of handwriting behavior

C. Construction and use of teacher-made pre and post-teaching diagnostic devices

   1. Letter-formation, slant and spacing scales

D. Selection, use and interpretation of standardized handwriting scales

E. Selection, construction and use of teaching materials

  1. Dictation writing tasks
  2. Copying tasks

F. Selection and organization of activities

  1. Matching handwriting goals with activities
  2. Explaining purpose of activity to pupil
  3. Giving directions for the organization and execution of the activity

G. Lesson planning

  1. Individual and total group
  2. Multigroup and individualized

H. Unit planning

  1. Handwriting units
  2. Integrated with other language arts or with other subject complexes

I. Curriculum planning

  1. Identifying handwriting curriculum problems
  2. Clarifying curriculum objectives in handwriting
  3. Planning curriculum development schedule
  4. Interpreting the curriculum to the public
  5. Evaluating handwriting curriculum

VIII. Writing

A. Classification of pupil subject-related behavior

  1. Description of pupil's writing
  2. Relation of writing to environmental and developmental factors

B. Behavioral statements of objectives

  1. Translate concept, principle and problem-solving goals into terms of writing behavior

C. Construction and use of teacher-made pre and post-teaching diagnostic devices

1. Scales for rating clarity, conciseness, logical progression, mechanics, etc.

D. Selection, construction and use of teaching materials

   1. Reaction devices to initiate writing
   2. Literary selection
   3. Resource persons and field trips

E. Selection and organization of activities

   1. Matching goals with the most appropriate activities
   2. Explaining to pupils the purpose of the activity
   3. Giving directions for the organization and execution of the activity

F. Lesson planning

   1. Individual and total group
   2. Multigroup and individualized

G. Unit planning

   1. Writing topic units
   2. Integrated with other language arts or with other subject complexes

H. Curriculum planning

   1. Identifying curriculum problems in writing
   2. Clarifying the curricular objectives of writing
   3. Planning curriculum development schedule
   4. Interpreting curriculum to the various publics
   5. Evaluating writing curriculum

Reading

I. Visual-auditory perception and visual-motor skills

   A. Classification of pupil subject-related behavior

      1. Identification of auditory discrimination level
      2. Identification of visual discrimination level
      3. Identification of visual-motor skill level
      4. Relation of perception and coordination skills to environmental and developmental factors

   B. Behavioral statement of objectives

      1. Translation of stimulus-response, multiple discrimination and concept objectives into observable perception and coordination behaviors

C. Construction and use of teacher-made pre and post-teaching diagnostic devices

    1. Anecdotal records
    2. Checklists
    3. Motor activity scales
    4. Visual perception tasks
    5. Auditory perception tasks
    6. Rating scales for drawings, colleges, etc.

D. Selection, use and interpretation of standardized achievement tests

E. Selection, construction and use of teaching materials

    1. Rhythmic activities
    2. Finger plays
    3. Poems and stories for recitation
    4. Songs
    5. Drawing activities
    6. Finger painting activities
    7. Painting activities
    8. Mixed media activities
    9. Construction activities
    10. Cutting and pasting activities
    11. Formalized worksheet activities

F. Selection and organization of activities

    1. Matching goals with most appropriate activities
    2. Explaining to children the purpose of activity
    3. Giving directions for organization and execution of activity

G. Lesson planning

    1. Individual and total group
    2. Multigroup and individualized

H. Unit planning

    1. Single subject unit
    2. Integrated with other language arts and other subject complexes

I. Curriculum planning

    1. Identifying curricular problems in discrimination and coordination
    2. Clarifying curriculum objectives

   3. Planning curriculum development schedule
   4. Interpreting curriculum to public
   5. Evaluating curriculum

II. Developmental reading

A. Classification of pupil subject-related behavior

   1. Description of reading behavior
   2. Relation of reading behavior with environmental and developmental factors

B. Behavioral statement of objectives

   1. Translation of stimulus-response, multiple discrimination, concept and principle objectives into terms of observable reading behavior

C. Construction of teacher-made pre and post-teaching diagnostic devices

   1. Group and individual rate and comprehension inventories
   2. Oral reading inventories
   3. Vocabulary inventories

D. Selection, use and interpretation of standardized achievement tests

E. Selection, construction and use of teaching materials

   1. Vocabulary building devices
   2. Experience charts
   3. Phonic element devices
   4. Word identification games
   5. Word building games
   6. Context clue devices
   7. Dictionary devices

F. Selection and organization of activities

   1. Matching goals with most appropriate activities
   2. Explaining purpose of activity to children
   3. Giving directions for organization and execution of activity

G. Lesson planning

   1. Individual and total group
   2. Multigroup and individualized

- H. Unit planning
    1. Reading units
    2. Integrated with other language arts and other subjects
- I. Curriculum planning
    1. Identifying reading curricular problems
    2. Clarifying curricular objectives
    3. Planning of curriculum development schedule
    4. Interpreting curriculum to public
    5. Evaluating curriculum

III. Reading study skills

- A. Classification of pupil subject-related behavior
    1. Description of reading study skill behaviors
    2. Relation of reading study skill development to environmental and developmental factors
- B. Behavioral statement of objectives
    1. Translation of multiple discrimination, concept and principle goals into observable reading study skill behaviors
- C. Construction and use of teacher-made pre and post-teaching diagnostic devices
    1. Alphabetization tests
    2. Relevant source identification tests
    3. Hierarchy of relevant information tests
    4. Skimming comprehension tests
    5. Usage of specific relevant source tests
    6. Note-taking tests
- D. Selection, use and interpretation of standardized achievement tests
- E. Selection, construction and use of teaching materials
    1. Sequential component tasks for skill complexes
    2. Identification and correction of incorrect information tasks
    3. Problems in information collection
    4. Problems in information organization
    5. Problems in information presentation
- F. Selection and organization of activities
    1. Matching goals with most appropriate activities
    2. Explaining to pupils the purpose of activity
    3. Giving directions for the organization and execution of activity

G. Lesson planning

  1. Individual and total group
  2. Multigroup and individualized

H. Unit planning

  1. Single subject
  2. Integrated with other language arts or other subjects

I. Curriculum planning

  1. Identifying curriculum problems in reading study skills
  2. Clarifying objectives of the reading study curriculum
  3. Planning of curriculum development schedule
  4. Interpreting curriculum to public
  5. Evaluation of curriculum

IV. Children's Literature

A. Classification of pupil subject-related behavior

  1. Description of pupil's literary habits and preferences
  2. Relation of reading habits and preferences to environment and developmental factors

B. Behavioral statement of objectives

  1. Translation of concept, principle and problem solving goals into observable literary reading behaviors

C. Construction and use of teacher-made pre and post-teaching diagnostic devices

  1. Reading preference inventories
  2. Reading rate inventories
  3. Reading comprehension and retention inventories

D. Selection, use and interpretation of standardized achievement tests

E. Selection, construction and use of teaching materials

  1. Fiction
  2. Non-fiction
  3. Poetry
  4. Resource persons and field trips
  5. Library usage training materials
  6. Interest-arousing devices
  7. Reading recording devices

F. Selection and organization of activities

1. Matching goals with most appropriate activities
2. Explaining to pupils the purpose of activity
3. Giving directions for organization and execution of activity

G. Lesson planning

1. Individual and total group
2. Multigroup and individualized

H. Unit planning

1. Literature units
2. Integrated with other language arts and other subjects

I. Curriculum planning

1. Identifying curricular problems in children's literature
2. Clarifying objectives for children's literature
3. Planning of curriculum development schedule
4. Interpreting curriculum to public
5. Evaluating curriculum

Social Studies

I. Locating, organizing and using information

A. Classification of pupil subject-related behavior

1. Description of data handling behavior
2. Relation of behavior to environmental and developmental factors

B. Behavioral statement of objectives

1. Translation of multiple discrimination, concept, principle and problem-solving goals into terms of information handling behavior

C. Construction and use of teacher-made pre and post-teaching diagnostic devices

1. Identification of appropriate source tasks
2. Map, globe, chart and graph reading tests
3. Library usage tasks
4. Current press usage tests
5. Selection of relevant data tasks
6. Note taking tests - written sources
7. Note taking tests - oral presentations

    8. Interviewing tests
    9. Information synthesis tasks
    10. Presentation of information - written
    11. Presentation of information - oral
    12. Presentation of information - graphic

D. Selection, use and interpretation of standardized achievement tests

E. Selection, construction and use of teaching materials

    1. Maps, globes, charts and graphs
    2. Newspapers and magazines
    3. Historical sources
    4. Social science sources
    5. Resource persons and field trips
    6. Films, filmstrips and recordings
    7. Mapping equipment
    8. Manuals on identification of flora, fauna, geological formations, etc.
    9. Detailed community information surveys
    10. Accurate fiction sources related to social studies topics

F. Selection and organization of activities

    1. Matching goals with the most appropriate activities
    2. Explaining the purpose of activity to pupils
    3. Giving directions to pupils for the organization and execution of activities

G. Lesson planning

    1. Individual and total group
    2. Multigroup and individualized

H. Unit planning

    1. Social studies units
    2. Integrated with other subjects

I. Curriculum planning

    1. Identifying information handling curriculum problems
    2. Clarifying curriculum objectives in information handling
    3. Planning curriculum development schedule
    4. Interpreting curriculum to public
    5. Evaluating curriculum

II. Value examination

A. Classification of pupil subject-related behavior

    1. Description of pupil's social values as perceived by observer and by pupil
    2. Relation of value expressions to environmental and developmental factors

  B. Behavioral statement of objectives

    1. Translation of concept and principle goals into terms of valuing behavior

  C. Construction and use of teacher-made pre and post-teaching diagnostic devices

    1. Value classification checklists
    2. Value identification tasks
    3. Value expression tasks

  D. Selection, construction and use of teaching materials

    1. Radio and television programs
    2. Current press sources
    3. Textbooks
    4. Samples of propaganda literature
    5. Value stories
    6. Role-playing situations

  E. Selection and organization of activities

    1. Matching goals with the most appropriate activities
    2. Explaining purposes of activity to pupils
    3. Giving directions for organization and execution of activity

  F. Lesson planning

    1. Individual and total group
    2. Multigroup and individualized

  G. Unit planning

    1. Identifying curricular problems in value clarification
    2. Clarifying curricular objectives in value clarification
    3. Planning curriculum development schedule
    4. Interpreting curriculum to public
    5. Evaluating curriculum

III. Problem solving

  A. Classification of pupil subject-related behavior

    1. Description of problem solving processes used by pupils

2. Relation of problem-solving behavior to environmental and developmental factors

B. Behavioral statement of objectives

  1. Translation of concept, principle and problem-solving goals into terms of problem solving behavior

C. Construction and use of teacher-made pre and post-teaching diagnostic devices

  1. Problem identification tasks
  2. Selection of relevant data tasks
  3. Identification of possible alternative tasks
  4. Problem solving tasks

D. Selection, construction and use of teaching materials

  1. Newspaper and magazine sources
  2. Non-fiction literature sources
  3. Film, radio and television sources
  4. Commercially produced problem reaction materials (films, filmstrips, recordings, pictures, booklets, etc.)

E. Selection, and organization of activities

  1. Matching goals with the most appropriate activities
  2. Explaining to pupils the purpose of activity
  3. Giving directions for organization and execution of activity

F. Lesson planning

  1. Individual and total group
  2. Multigroup and individualized

G. Unit planning

  1. Problem solving units
  2. Integrated with other subjects

H. Curriculum planning

  1. Identifying curricular problems in problem-solving
  2. Clarifying curricular goals for problem-solving
  3. Planning of curriculum development schedule
  4. Interpreting curriculum to public
  5. Evaluating curriculum

Science

A. Classification of pupil subject-related behavior

1. Observing
2. Using space-time relationships
3. Using numbers
4. Measuring
5. Classifying
6. Communicating
7. Predicting
8. Inferring

(Relation of all the above to environmental and developmental factors)

B. Behavioral statement of objectives

   1. Translation of multiple discrimination, concept, principle and problem solving goals into terms of pupil's scientific behavior

C. Construction of teacher-made pre and post-teaching diagnostic devices

   1. Tasks requiring differentiation among textures, volumes, tastes, sizes, shapes, colors, consistencies, weights, temperatures, velocities, etc.
   2. Tasks requiring identification of position, space, direction, clock time, etc.
   3. Tasks requiring differentiation between speeds of objects, speed of an object and distance it moves, moving and stationary objects, speed with which an object changes position and time required for its arrival at a given point, etc.
   4. Tasks requiring demonstrations, such as, systems moving at angular directions, whether an object has changed position, an object may be folded in more than one way to produce halves, etc.
   5. Tasks requiring identification and comparison of sets, use of symbolic notation, writing of number sentences, etc.
   6. Tasks requiring ordering of objects by measured length, finding dimensions of objects in centimeters, decimeters or meters, finding area, finding volume, temperature, weight, etc.
   7. Tasks requiring demonstration of procedure for finding the volume of a liquid using a drop as the unit of volume or when using standard metric units such as volume, etc.
   8. Tasks requiring use of two single stage systems for classifying objects differing in several characteristics or qualities, the construction of a classification system based on operational definition, etc.
   9. Tasks requiring the construction of a bar graph from a frequency distribution and a frequency distribution from a bar graph, identifying and naming the axis of a bar graph, making force

diagrams to show situations in which a force is acting on a body, making a line segment and angle drawing to describe the changes in length and direction of an object's shadow, etc.

10. Tasks requiring construction of tests of predictions, a revision of a prediction on the basis of additional data, constructing the relationship between two variables that can be used to make a prediction, etc.
11. Tasks requiring differentiation between inferences that account for all stated observations and those that do not, ordering inferences with respect to reliability, drawing the transverse, slant and longitudinal sections of common three-dimensional objects, etc.

D. Selection, use and interpretation of standardized achievement tests

E. Selection, construction and use of teaching materials

1. Measuring device
2. Heat and cold sources
3. Geometic shapes
4. Three-dimensional shapes corresponding to patterns
5. Examples of simple and complex machines
6. Commercially-produced sets of science teaching materials

F. Selection and organization of activities

1. Matching goals with the most appropriate activities
2. Explaining purpose of activity to pupils
3. Giving directions for organization and execution of activity

G. Lesson planning

1. Individual and total group
2. Multigroup and individualized

H. Unit planning

1. Science units
2. Integrated with other subjects

I. Curriculum planning

1. Identifying science curriculum problems
2. Clarifying science curriculum objectives
3. Planning of curriculum development schedule
4. Interpreting science curriculum to public
5. Evaluating science curriculum

Mathematics

A. Classification of pupil subject-related behavior

1. Selection of information relevant to solution of a problem
2. Use of a variety of algorisms in the four basic operations
3. Application of the four basic operations, measurement, geometry, algebra, percent, ratio, proportion, coordinates and graphing, statistics, relations and functions, and logic to problem solution
4. Application of interrelated concepts in thinking, e.g., prime factoring, reducing to lowest terms, intersection of sets
5. Making inferences about numbers
6. Using intuition, application of arithmetic principles or algebraic procedures in mathematical thinking
7. Application of the concepts of base and place
8. Using sets
9. Using equivalence relationships
10. Using laboratory methods in creative problem-solving

B. Behavioral statement of objectives

1. Translate multiple discrimination, concept, principle and problem-solving goals into terms of pupil's mathematical thinking behavior

C. Construction and use of teacher-made pre and post-teaching diagnostic teaching devices

1. Sequential tasks to discover exact weaknesses in concepts relating directly to computation, e.g., a series of substraction examples requiring regrouping in the tens, hundreds, and thousands places
2. Tasks requiring application of the properties of the four basic operations, e.g., commutative property in addition and multiplication
3. Tasks requiring the application of the concept of set
4. Tasks requiring application of the concept of place value
5. Tasks requiring the application of concepts relating to the relationships of positive numbers to zero and to negative numbers
6. Tasks requiring application of an understanding of the relationship between integers and fractions
7. Tasks requiring application of ability to count
8. Tasks requiring ability to make inferences
10. Tasks requiring application of reading to mathematical problem solving

D. Selection, use and interpretation of standardized mathematics achievement tests

E. Selection, construction and use of teaching materials

  1. Abacus, counting frame, pocket chart and other counting-place devices
  2. Flannel or magnet board
  3. Number games and puzzles
  4. Fraction kits
  5. Squares and strips kits
  6. Motion pictures and filmstrips
  7. Text and other symbolic materials
  8. Geometric shapes kits

F. Selection and organization of activities

  1. Matching goals with the most applicable activities
  2. Explaining purpose of activity to pupils
  3. Giving directions for organization and execution of activity

G. Lesson planning

  1. Individual and total group
  2. Multigroup and individualized

H. Unit planning

  1. Units on mathematical topics
  2. Units integrated with other subjects

I. Curriculum planning

  1. Identifying mathematics curriculum problems
  2. Clarifying mathematics curriculum objectives
  3. Planning of curriculum development schedule
  4. Interpreting mathematics curriculum to public
  5. Evaluating mathematics curriculum

APPENDIX B

PROJECT STAFF AND CONSULTANTS

PROJECT STAFF AND CONSULTANTS

In addition to the authors listed on the Title Page of this report, many other staff personnel and consultants have rendered vital services in the preparation of this document. Listed below are the members of the Syracuse University staff and consultants to the authors.

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